Department of Energy

Ohio Field Office
Fernald Closure Project
175 Tri-County Parkway
Springdale, Ohio 45246
(513) 648-3155

DEC 28 2004

DOE-0108-05

Mr. James A. Saric, Remedial Project Manager
United States Environmental Protection Agency
Region V, SR-6J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Mr. Tom Schneider, Project Manager
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, Ohio 45402-2911

Mr. Bill Kurey
United States Fish & Wildlife Service, Suite H
6950 American Parkway
Reynoldsburg, OH 43068

Dear Mr. Saric, Mr. Schneider, and Mr. Kurey:

TRANSMITTAL OF THE OCTOBER 14, 2004 INSPECTION CHECKLIST FOR ON-SITE DISPOSAL FACILITY CELL 1 AND 2 CAPS

The purpose of this letter is to transmit the completed checklist for the October 14, 2004 inspection of the On-Site Disposal Facility (OSDF) Cell 1 and 2 Caps for your review. The inspection was conducted with participation from Tetra Tech, Inc. supporting the United States Environmental Protection Agency (USEPA), Ohio Environmental Protection Agency (OEPA), Ohio Department of Health (ODH), Department of Energy, Fernald Closure Project (DOE-FCP), DOE-Office of Legacy Management, and Fluor Fernald, Inc. The inspection was the seventh conducted on the Cell 1 Cap and the third conducted on the Cell 2 Cap and generally found both caps to be in good condition. The photos included with the enclosures were taken two weeks after the actual inspection. The original photographs, taken with a digital camera, were lost when being downloaded from the camera.

During the October 2004 inspection, minor erosion rills were noticed on both cell caps, but none met the 3-inch by 6-inch criteria for repair. There was also much evidence of animal burrowing or digging, especially on the east face of Cell 2. The majority of the burrows were no more than a few inches deep. There were two depression areas on Cell 1. These areas will be monitored. There was one location on the west side of Cell 1 where woody vegetation is growing, and the

woody vegetation will be removed. Some thistle was identified on the Cell 1 Cap. The Cell 1 cap will be monitored closely for thistle in the early spring. Any thistle that appears will be treated with a selective herbicide. On Cell 2, there is a larger hole (2-foot by 9-inch by 7-inch) on the west side that needs to be filled in. The hole appears to be caused either by a tire from the mower used to cut the cell or possibly an animal digging.

The Cell 3 cap had just been seeded at the time of the October 2004 inspection. The Cell 3 cap was viewed from the top of Cell 2, but a formal inspection did not occur. The Cell 3 Cap will be included in the next OSDF Cell cap inspection, which is scheduled for early February 8, 2005 at 1:00 p.m.

If you have any questions or require additional information, please contact Johnny Reising at (513) 648-3139.

Sincerely,

Johnny Reising

for William J. Taylor
Director

FCP:Reising

Enclosure: As Stated

cc w/enclosure:
J. Craig, DOE-LM
C. Jacobson, DOE-LM
J. Powell, DOE-LM
D. Pfister, DOE-OH/FCP
J. Reising, DOE-OH/FCP
E. Skintik, DOE-OH/FCP
G. Stegner, DOE-OH
F. Bell, ATSDR
D. Bidwell, FCAB
M. Cullerton, Tetra Tech
G. Jablonowski, USEPA-V, SR-6J
D. Sarno, FCAB
T. Schneider, OEPA-Dayton (three copies of enclosure)
M. Shupe, HSI GeoTrans
R. Vandegrift, ODH
AR Coordinator, Fluor Fernald, Inc./MS78

cc w/o enclosure:
K. Alkema, Fluor Fernald, Inc./MS01
J. Chiou, Fluor Fernald, Inc./MS64
J. Homer, Fluor Fernald, Inc./MS90
U. Kumthekar, Fluor Fernald, Inc./MS64
L. McHenry, Fluor Fernald, Inc./MS90
C. Murphy, Fluor Fernald, Inc./MS77
D. Nixon, Fluor Fernald, Inc./MS01
F. Johnston, Fluor Fernald, Inc./MS52-5
D. Powell, Fluor Fernald, Inc./MS64
H. Swiger, Fluor Fernald, Inc./MS90
S. Walpole, Fluor Fernald, Inc./MS76
E. Woods, Fluor Fernald, Inc./MS90
ECDC, Fluor Fernald, Inc./MS52-7

OSDF Cell 1 Post Closure Inspection Checklist

Date of Inspection: October 14, 2004 Weather Conditions: Cool and cloudy

Time of Inspection: 9:00 A.M. Temperature: 50 °F Wind Speed (Miles per hour) and Direction: 12 – 16 mph. w

Inspection By: Fluor Fernald, DOE-FCP, OLM, OEPA, Ohio Department of Health, Tetra Tech Inc. Transect Direction: East/West

Inspection Component	Condition A* or U*	Comments	Corrective Action(s) Proposed	Reference Source
1. Entrance Road/Monitoring Access Road				
1A. Verify entrance gate, lock and signage are intact and in good working order.	A	N/A	N/A	PCC&IP 20100-PL-010 Rev. 1 July 97
1B. Verify that access gates are locked to prevent unauthorized entry.	A	N/A	N/A	"
1C. Visually observe condition of access road for signs of erosion, ruts, standing water, proper drainage and excess vegetation.	A	N/A	N/A	"
1D. Verify that access road surfacing, cross slope, reflectors, and signage are intact and in good condition.	A	N/A	N/A	"
2. Chain Link Fence and Signage				
2A. Walk length of fence and ensure fence, posts, etc. are intact and in good condition. Ensure that gates are closed/locked to prevent unauthorized entry.	A	N/A	N/A	PCC&IP & OSDF Tech Spec #02831
2B. Verify that the proper signage is intact and in good condition at the following locations: Restricted Access; Certified Area; and Restored Area. (Some signs not installed at this time).	A	N/A	N/A	"
2C. Check for vegetation growing over fences, barricades, signs and any noxious vegetation per State of Ohio Regulations (attached) and invasive plants growing on or around OSDF perimeter.	A	N/A	N/A	"
3. Surface Water Management				
3A. Check integrity of drainage channels around OSDF for erosion or debris restricting water flow (see attached map). Build up of debris/sedimentation in drainage ditch is not to exceed 6 inches.	A	N/A	N/A	OSDF Tech. Spec. #02270; PCC&IP
3B. Visually check the integrity of RipRap in drainage channels for signs of deterioration or removal of rock.	A	N/A	N/A	See above & OSDF Tech. Spec. #02271
3C. Visually check for the presence of woody vegetation growing in drainage channels and in Rip-Rap	A	N/A	N/A	"
3D. Visually check the integrity of run-on and run-off control features including: Ditch checks, Gravity Inlet structures, and Culverts.	A	N/A	N/A	See above & Construction Drawing # 90X-6000-G-00073

*A = Satisfactory *U = Unsatisfactory (comments required)

** Transect Direction should alternate each inspection (North to South & East to West)

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OSDF Cell 1 Post Closure Inspection Checklist

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Inspection Component	Condition A* or U*	Comments	Corrective Action(s) Proposed	Reference Source
4. (A) Final Cover				
4A. Walk cover and side slopes in 25-ft (+/- 5-ft) transects and visually inspect for the following items:**				PCC&IP
4A1. Inspect erosion rills/channels. Flag any observable rills/channels greater than 3 inches wide and 6 inches deep or excessive erosion.	U	Some small erosion rills present	Rills did not measure 3" by 6" and do not require repair	"
4A2. Any observable depressions, settlement/subsidence, slumping or desiccation cracks. Flag any observable depressions, slumps, settlement/subsidence or dessication cracks.	U	There are two areas where depressions were located; near the top on the east face; one on the northeast corner	The areas will be monitored. If there is progression, the areas will be repaired.	"
4A3. Any ponding or standing water. Flag any standing water.	A	N/A	N/A	"
4A4. Evidence of burrowing animals or other bio-intrusion. Flag any observable evidence of bio-intrusion.	U	There are many locations where animals were digging. The burrows do not go more than a few inches at most locations.	None of the burrows are currently active after a few weeks. Removed soil was pushed back into holes.	"
4A5. Evidence of vehicle traffic on the OSDF cap.	A	N/A	N/A	"
4B. Walk toe of slope and visually inspect for the following:				PCC&IP & Phase III Drwgs #90X-6000-G-00302 & 90X-6000-G-00310
4B1. Evidence of settlement/subsidence, erosion, and seepage. Flag any observable evidence of settlement/subsidence, erosion, or seepage.	A	N/A	N/A	"
4B2. A 20-ft corridor at the toe for the presence of woody vegetation, siltation, and/or biointrusion. Flag any woody vegetation, siltation, and/or biointrusion.	U	There is one location on the west side at the toe where woody vegetation is growing.	Woody vegetation needs to be removed.	"
4B3. Condition of rip-rap. Flag any observable abnormalities.	A	N/A	N/A	"
4C. Inspect toe at final cover for evidence of freezing or siltation. Flag any observable abnormalities.	A	N/A	N/A	"

***A** = Satisfactory ***U** = Unsatisfactory (comments required)

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Inspection By: Fluor Fernald, DOE-FCP, OLM, OEPA, Ohio Department of Health, Tetra Tech Inc. | Transect Direction: East/West

Inspection Component	Condition A* or U*	Comments	Corrective Action(s) Proposed	Reference Source
4. (B) Final Cover — Vegetation				
4D. Walk cover and side slopes in 25-ft (+/- 5-ft) transects and visually check vegetative cover for the following:				OSDF Tech. Spec. #02930
4D1. General health of grass cover and signs of stressed or dead grass should be noted.	A	N/A	N/A	"
4D2. Adequate grass coverage/density with no bares spots greater than 3-ft in diameter. Flag any bare spots greater than 3-ft in diameter. Any areas with questionable vegetative coverage will be sampled for percent cover and type of vegetation using meter-square quadrats.	A	N/A	N/A	"
4D3. Inspect the cover for the presence of woody vegetation (i.e., trees or shrubs) or noxious/invasive plants growing. Flag any woody and/or noxious/invasive vegetation for removal/herbicide.	U	Thistle is growing in a couple of patches on the north face of the cell.	Monitored cell cap in early spring for thistle. Any thistle will be treated with a selective herbicide.	"
5. Cover Monitoring System				
5A. Visually inspect the integrity of the cover monitoring system: check Junction boxes, manholes, pressure transducer risers, soil water status nest headers, and settlement plates of the remote monitoring system for evidence of damage (see attached map). Check that lids and caps on enclosures are intact and in good working order.	N/A	N/A	N/A	OSDF Drwg. # 90X-5500-E-00581 & 90X-5500-G-00577
5B. Visually inspect monitoring system manholes and junction boxes for the presence of animals, insects, rodents or misc. biota. Note the presence or evidence of any biota.	N/A	N/A	N/A	"
5C. Visually inspect manholes and junction boxes and their immediate vicinity for the presence of standing water. Flag all standing water.	N/A	N/A	N/A	"
6. Groundwater Monitoring Wells				
6A. Visually inspect all groundwater wells for damage and integrity of well infrastructure.	A	N/A	N/A	PPC&IP
6A1. Groundwater Monitoring Wells	A	N/A	N/A	"
6A2. Horizontal Monitoring Wells	A	N/A	N/A	"

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8 6 7 5

OSDF Cell 1 Post Closure Inspection Checklist

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Inspection By: Fluor Fernald, DOE-FCP, OLM, OEPA, Ohio Department of Health, Tetra Tech Inc. Transect Direction: East/West

Inspection Component	Condition A* or U*	Comments	Corrective Action(s) Proposed	Reference Source
7. Miscellaneous				
7A. Visually inspect the integrity of survey benchmarks. Flag/note any abnormalities.	A	N/A	N/A	PPC&IP
7B. Visually inspect the integrity of the perched water interceptor trench (once installed). Note any abnormalities.	A	N/A	N/A	
7C. Visually observe/inspect the corridor 50-ft outside of OSDF for signs/evidence of land use changes, settlement/subsidence, erosion, standing water, encroachment, livestock grazing or noxious vegetation. Note any changes/abnormalities.	A	N/A	N/A	
7D. Visually inspect all infrastructure for any act of vandalism.	A	N/A	N/A	"
7E. List any other observations not noted in the categories above.	U	A piece of silt fence is lying on the west side of the cell (at bottom near cell 2). It is not necessary that the fence be there.	The extra piece of silt fence can be removed.	"

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OSDF Cell 2 Post Closure Inspection Checklist

Date of Inspection: October 14, 2004 | Weather Conditions: Cool and cloudy

Time of Inspection: 9:00 A.M. | Temperature: 50 ^{0}F | Wind Speed (Miles per hour) and Direction: 12 – 16 mph. w

Inspection By: Fluor Fernald, DOE-FCP, OLM, OEPA, Ohio Department of Health, Tetra Tech, Inc. | Transect Direction**: East/West

Inspection Component	Condition A* or U*	Comments	Corrective Action(s) Proposed	Reference Source
1. Entrance Road/Monitoring Access Road				
1A. Verify entrance gate, lock and signage are intact and in good working order.	A	N/A	N/A	PCC&IP 20100-PL-010 Rev. 1 July 97
1B. Verify that access gates are locked to prevent unauthorized entry.	A	N/A	N/A	"
1C. Visually observe condition of access road for signs of erosion, ruts, standing water, proper drainage and excess vegetation.	A	N/A	N/A	"
1D. Verify that access road surfacing, cross slope, reflectors, and signage are intact and in good condition.	A	N/A	N/A	"
2. Chain Link Fence and Signage				
2A. Walk length of fence and ensure fence, posts, etc. are intact and in good condition. Ensure that gates are closed/locked to prevent unauthorized entry.	A	N/A	N/A	PCC&IP & OSDF Tech Spec #02831
2B. Verify that the proper signage is intact and in good condition at the following locations: Restricted Access; Certified Area; and Restored Area. (Some signs not installed at this time).	A	N/A	N/A	"
2C. Check for vegetation growing over fences, barricades, signs and any noxious vegetation per State of Ohio Regulations (attached) and invasive plants growing on or around OSDF perimeter.	A	N/A	N/A	"
3. Surface Water Management				
3A. Check integrity of drainage channels around OSDF for erosion or debris restricting water flow (see attached map). Build up of debris/sedimentation in drainage ditch is not to exceed 6 inches.	A	N/A	N/A	OSDF Tech. Spec. #02270; PCC&IP
3B. Visually check the integrity of RipRap in drainage channels for signs of deterioration or removal of rock.	A	N/A	N/A	See above & OSDF Tech. Spec. #02271
3C. Visually check for the presence of woody vegetation growing in drainage channels and in Rip-Rap	A	N/A	N/A	"
3D. Visually check the integrity of run-on and run-off control features including: Ditch checks, Gravity Inlet structures, and Culverts.	A	N/A	N/A	See above & Construction Drawing # 90X-6000-G-00073

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4A1. Inspect erosion rills/channels. Flag any observable rills/channels greater than 3 inches wide and 6 inches deep or excessive erosion.	U	Some small erosion rills are present.	Rills do not measure 3" by 6" and do not need repair.	"
4A2. Any observable depressions, settlement/subsidence, slumping or desiccation cracks. Flag any observable depressions, slumps, settlement/subsidence or dessication cracks.	A	N/A	N/A	"
4A3. Any ponding or standing water. Flag any standing water.	A	N/A	N/A	"
4A4. Evidence of burrowing animals or other bio-intrusion. Flag any observable evidence of bio-intrusion.	U	There is much evidence of animals digging, especially on the east side. The burrows do not go more than a few inches.	None of the burrows are currently active after a few weeks. Removed soil was pushed back into holes.	"
4A5. Evidence of vehicle traffic on the OSDF cap.	A	N/A	N/A	"
4B. Walk toe of slope and visually inspect for the following:				PCC&IP & Phase III Drwgs #90X-6000-G-00302 & 90X-6000-G-00310
4B1. Evidence of settlement/subsidence, erosion, and seepage. Flag any observable evidence of settlement/subsidence, erosion, or seepage.	A	N/A	N/A	"
4B2. A 20-ft corridor at the toe for the presence of woody vegetation, siltation, and/or biointrusion. Flag any woody vegetation, siltation, and/or biointrusion.	A	N/A	N/A	"
4B3. Condition of rip-rap. Flag any observable abnormalities.	A	N/A	N/A	"
4C. Inspect toe at final cover for evidence of freezing or siltation. Flag any observable abnormalities.	A	N/A	N/A	"

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4D2. Adequate grass coverage/density with no bares spots greater than 3-ft in diameter. Flag any bare spots greater than 3-ft in diameter. Any areas with questionable vegetative coverage will be sampled for percent cover and type of vegetation using meter-square quadrats.	A	N/A	N/A	"
4D3. Inspect the cover for the presence of woody vegetation (i.e., trees or shrubs) or noxious/invasive plants growing. Flag any woody and/or noxious/invasive vegetation for removal/herbicide.	A	N/A	N/A	"
5. Cover Monitoring System				
5A. Visually inspect the integrity of the cover monitoring system: check Junction boxes, manholes, pressure transducer risers, soil water status nest headers, and settlement plates of the remote monitoring system for evidence of damage (see attached map). Check that lids and caps on enclosures are intact and in good working order.	N/A	N/A	N/A	OSDF Drwg. # 90X-5500-E-00581 & 90X-5500-G-00577
5B. Visually inspect monitoring system manholes and junction boxes for the presence of animals, insects, rodents or misc. biota. Note the presence or evidence of any biota.	N/A	N/A	N/A	"
5C. Visually inspect manholes and junction boxes and their immediate vicinity for the presence of standing water. Flag all standing water.	N/A	N/A	N/A	"
6. Groundwater Monitoring Wells				
6A. Visually inspect all groundwater wells for damage and integrity of well infrastructure.	A	N/A	N/A	PPC&IP
6A1. Groundwater Monitoring Wells	A	N/A	N/A	"
6A2. Horizontal Monitoring Wells	A	N/A	N/A	"

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Inspection Component	Condition A* or U*	Comments	Corrective Action(s) Proposed	Reference Source
7. Miscellaneous				
7A. Visually inspect the integrity of survey benchmarks. Flag/note any abnormalities.	N/A	N/A	N/A	PPC&IP
7B. Visually inspect the integrity of the perched water interceptor trench (once installed). Note any abnormalities.	A	N/A	N/A	
7C. Visually observe/inspect the corridor 50-ft outside of OSDF for signs/evidence of land use changes, settlement/subsidence, erosion, standing water, encroachment, livestock grazing or noxious vegetation. Note any changes/abnormalities.	A	N/A	N/A	
7D. Visually inspect all infrastructure for any act of vandalism.	A	N/A	N/A	"
7E. List any other observations not noted in the categories above.	U	On the west side of cell 2 there is a larger hole measuring 2 feet long, 9 inches wide, and 7 inches deep – cause unkown.	Hole needs to be filled in.	"

***A** = Satisfactory ***U** = Unsatisfactory (comments required)

8/16

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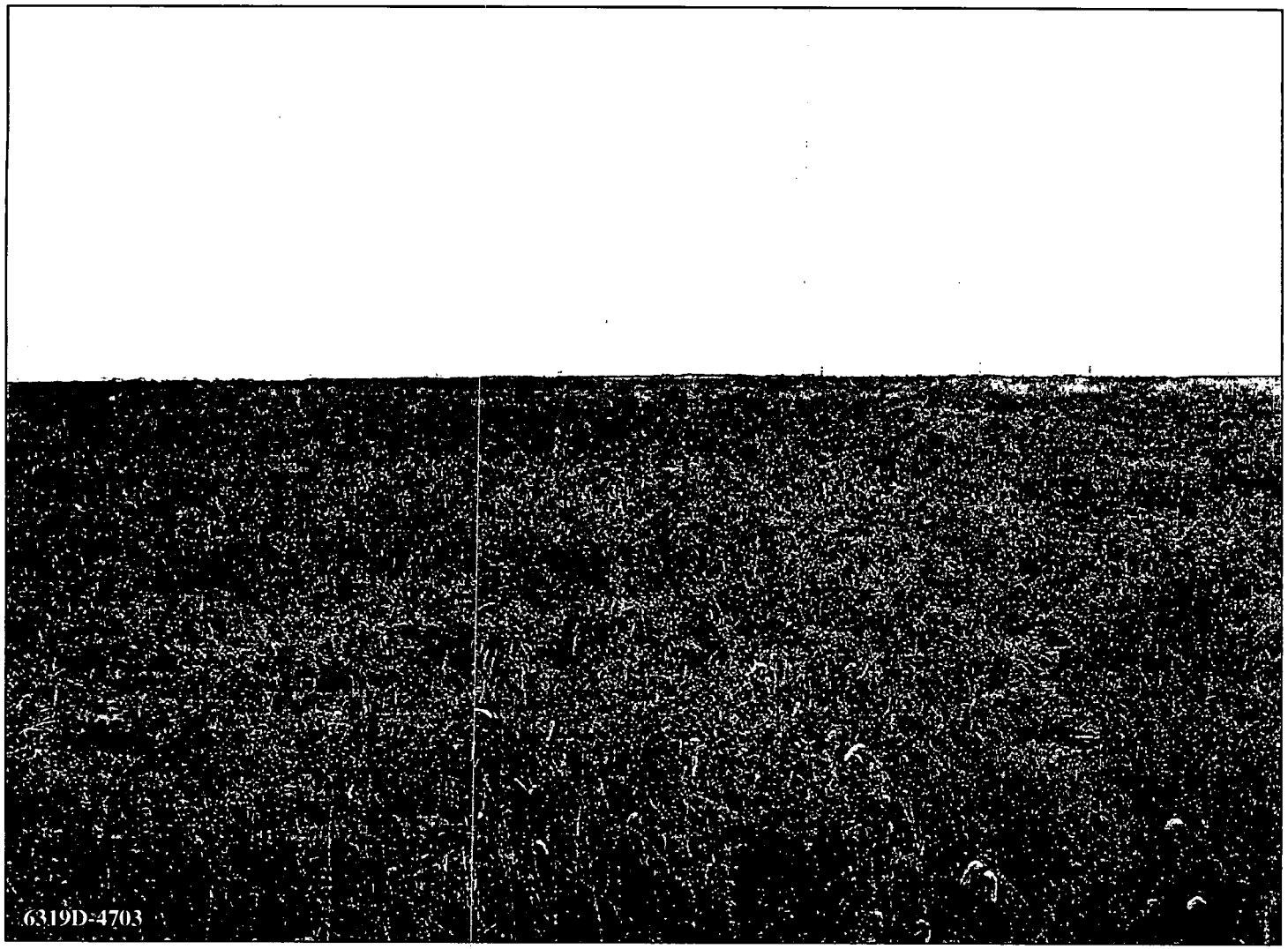
On-Site Disposal Facility Inspection Report

October 2004



North Face Cell 1

5788

Graphic 8306.2

10/04

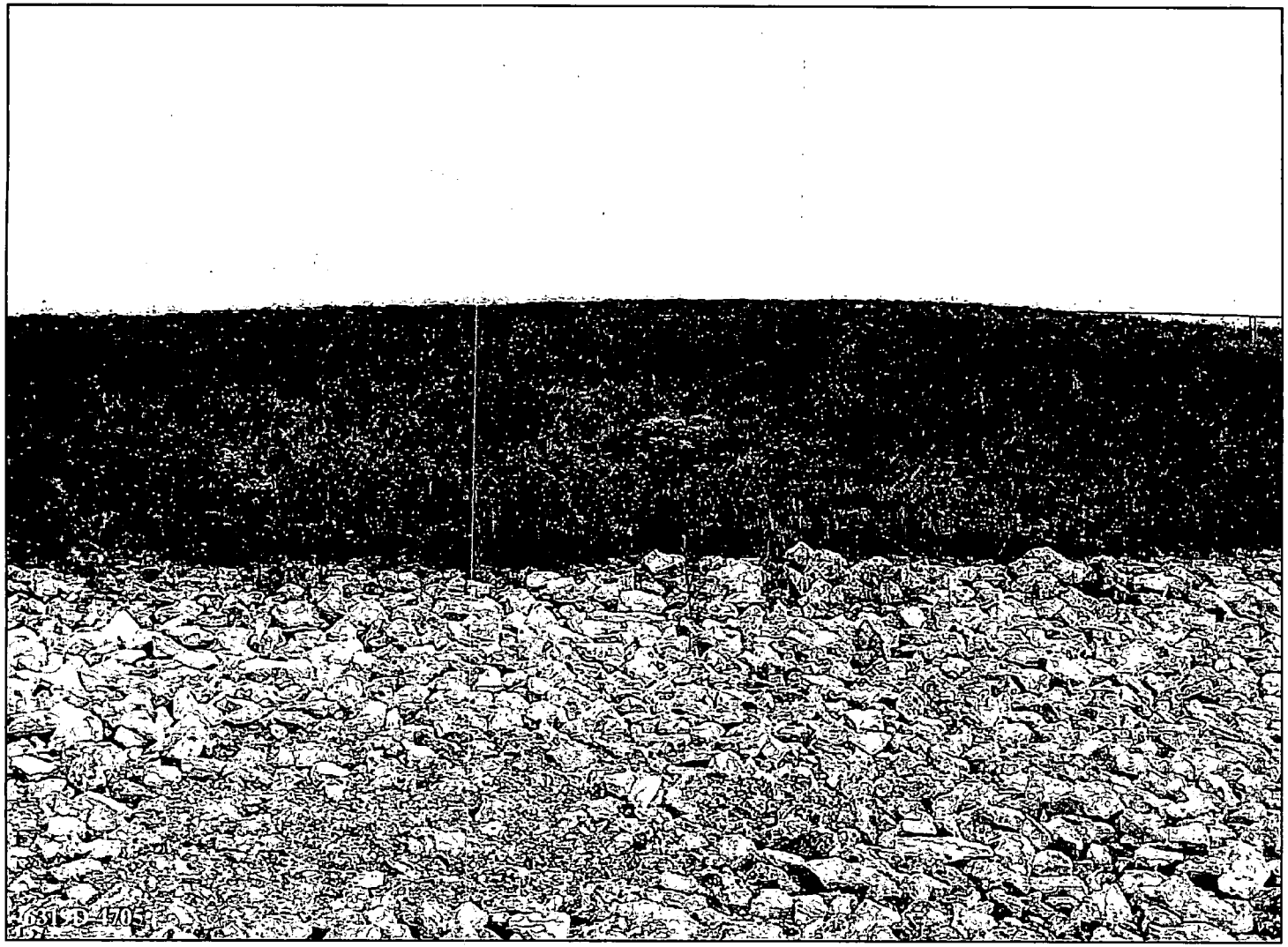
East Face Cell 1

5788

Graphic 8306.3

10/04

15



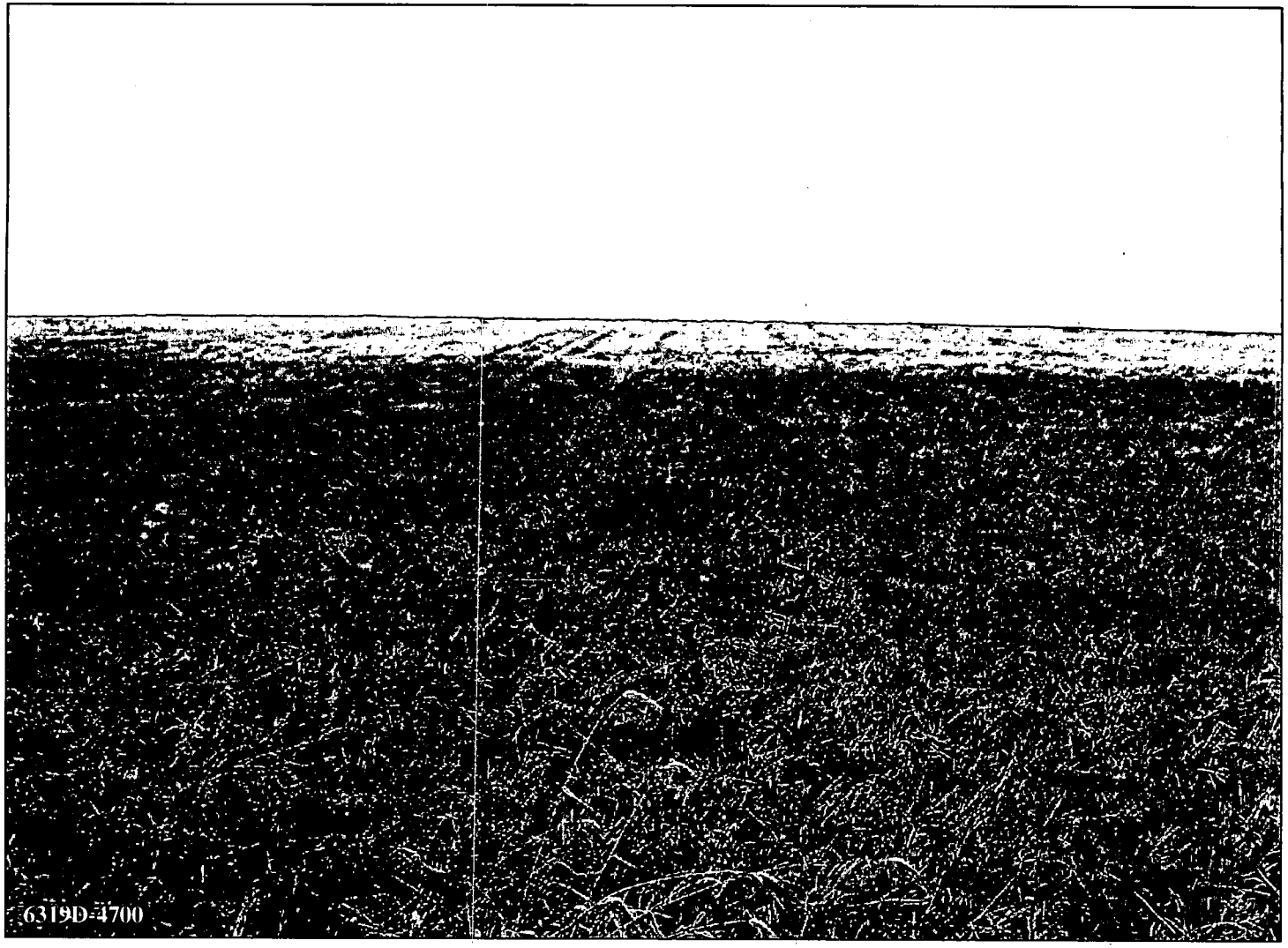
West Face Cell 1

5788

Graphic 8306.4

10/04

19



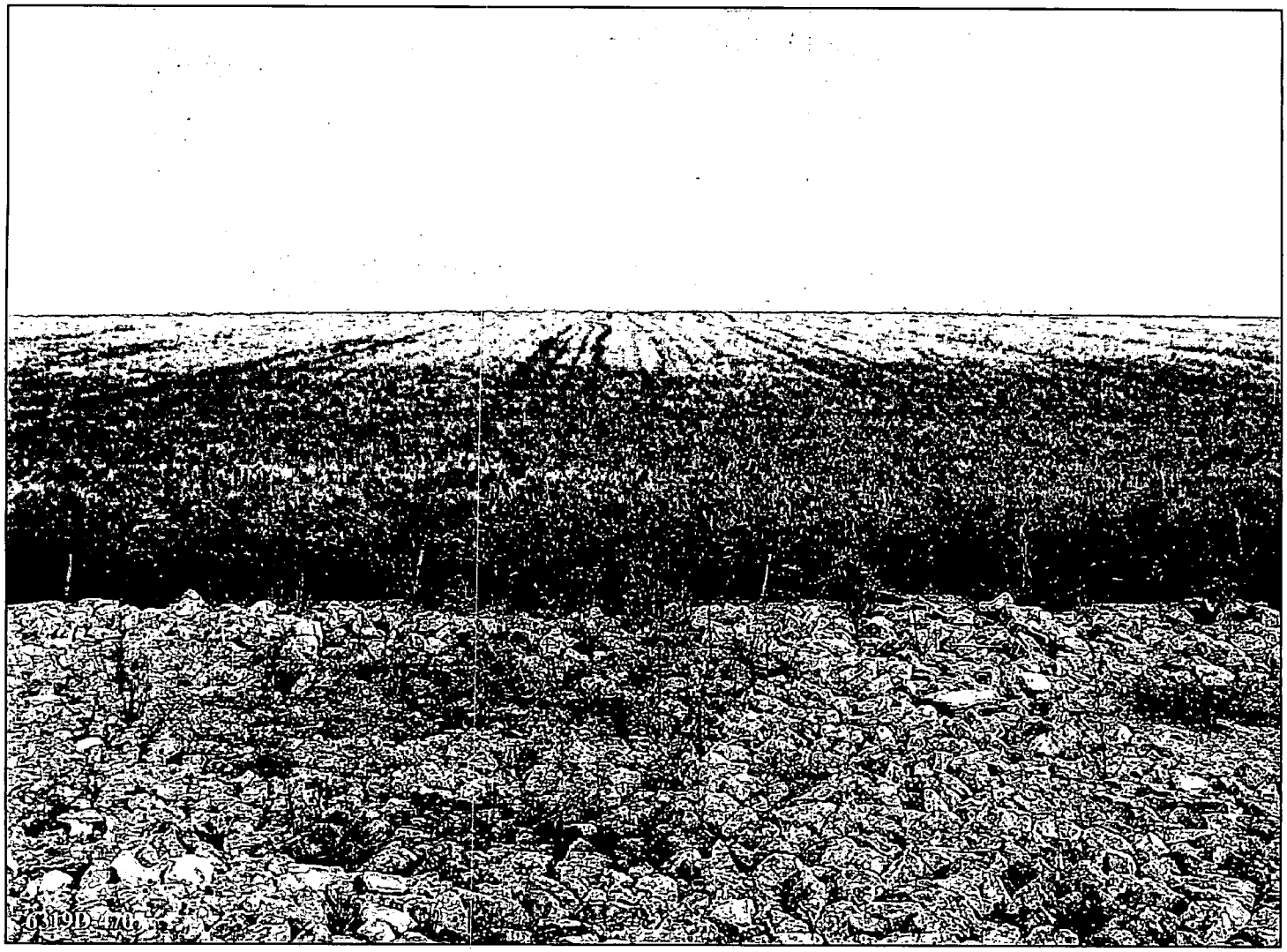
East Face Cell 2

5798

Graphic 8306.5

10/04

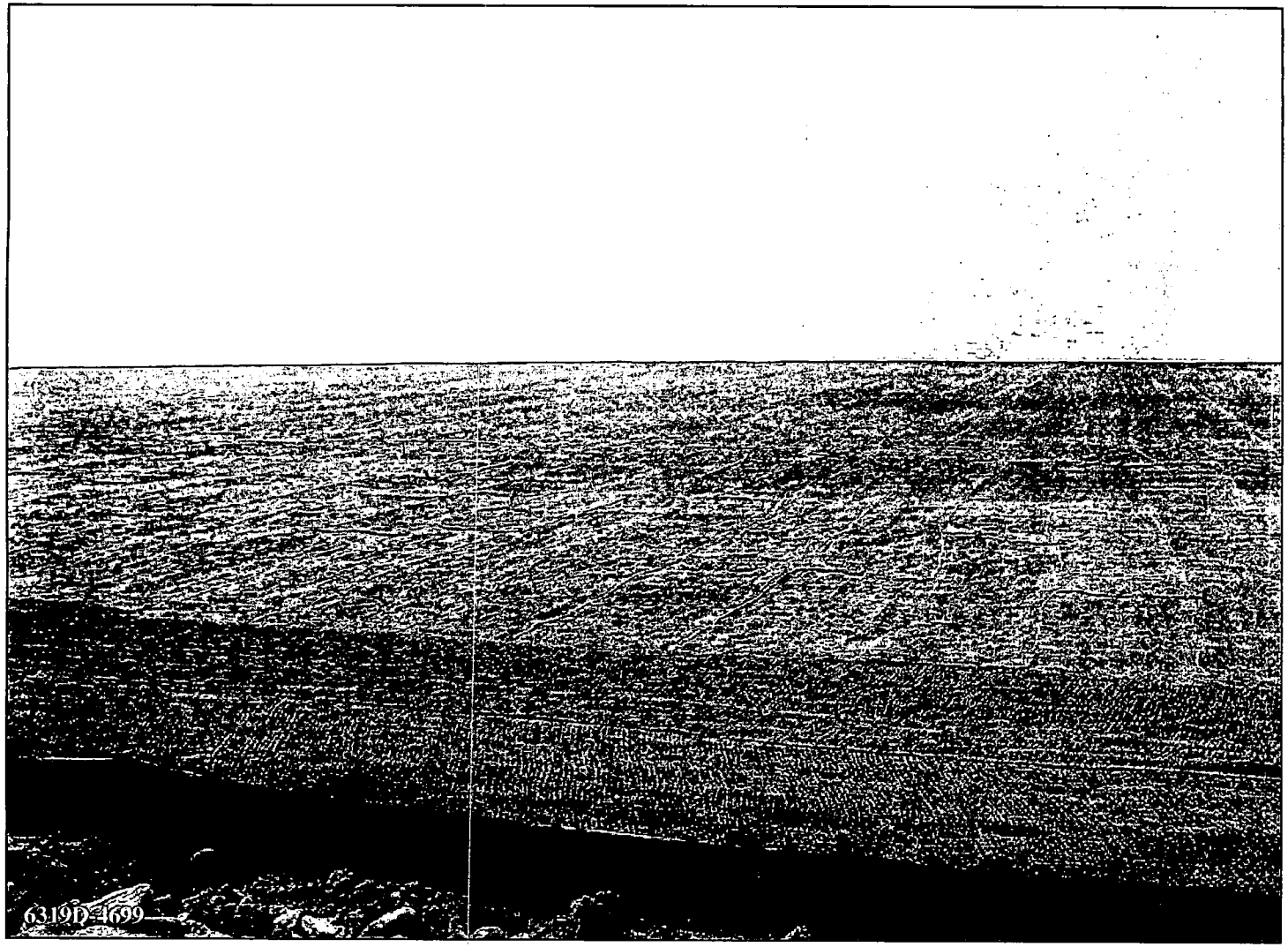
17



West Face Cell 2

Graphic 8306.6

10/04



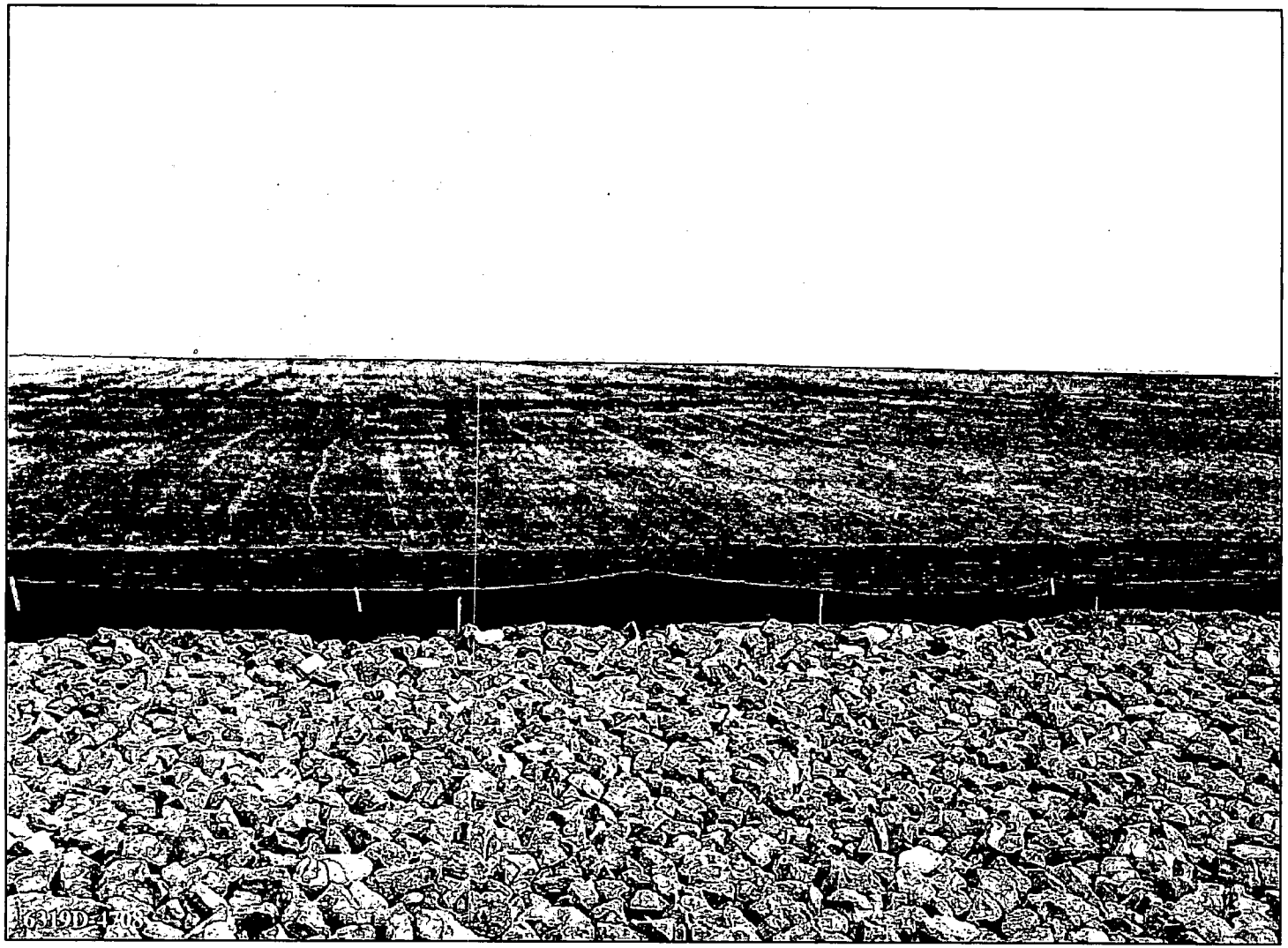
East Face Cell 3

5768

Graphic 8306.7

10/04

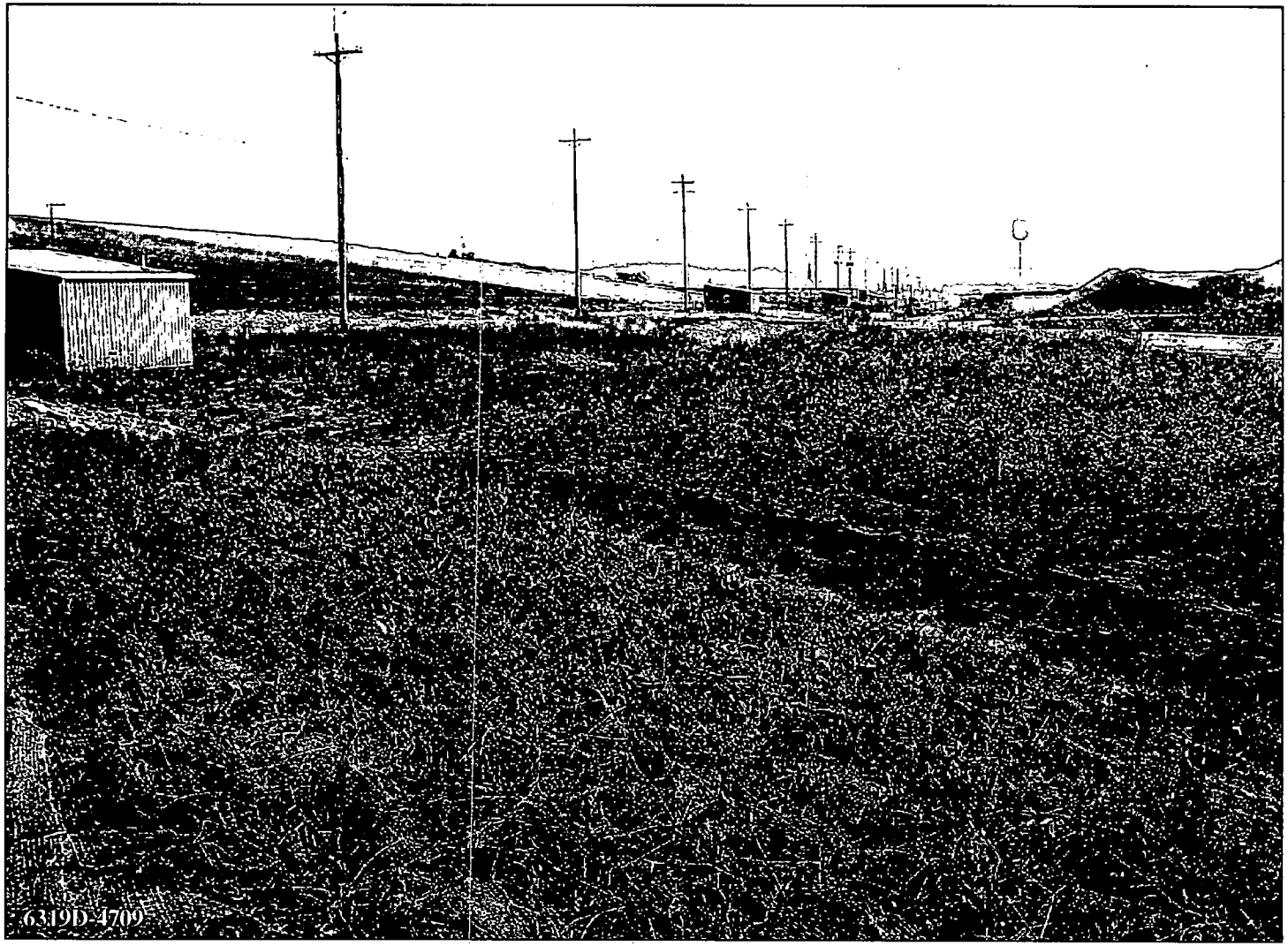
19



West Face Cell 3

Graphic 8306.8

10/04



Outer West Drainage
(looking south)

5788

Graphic 8306.8

10/04

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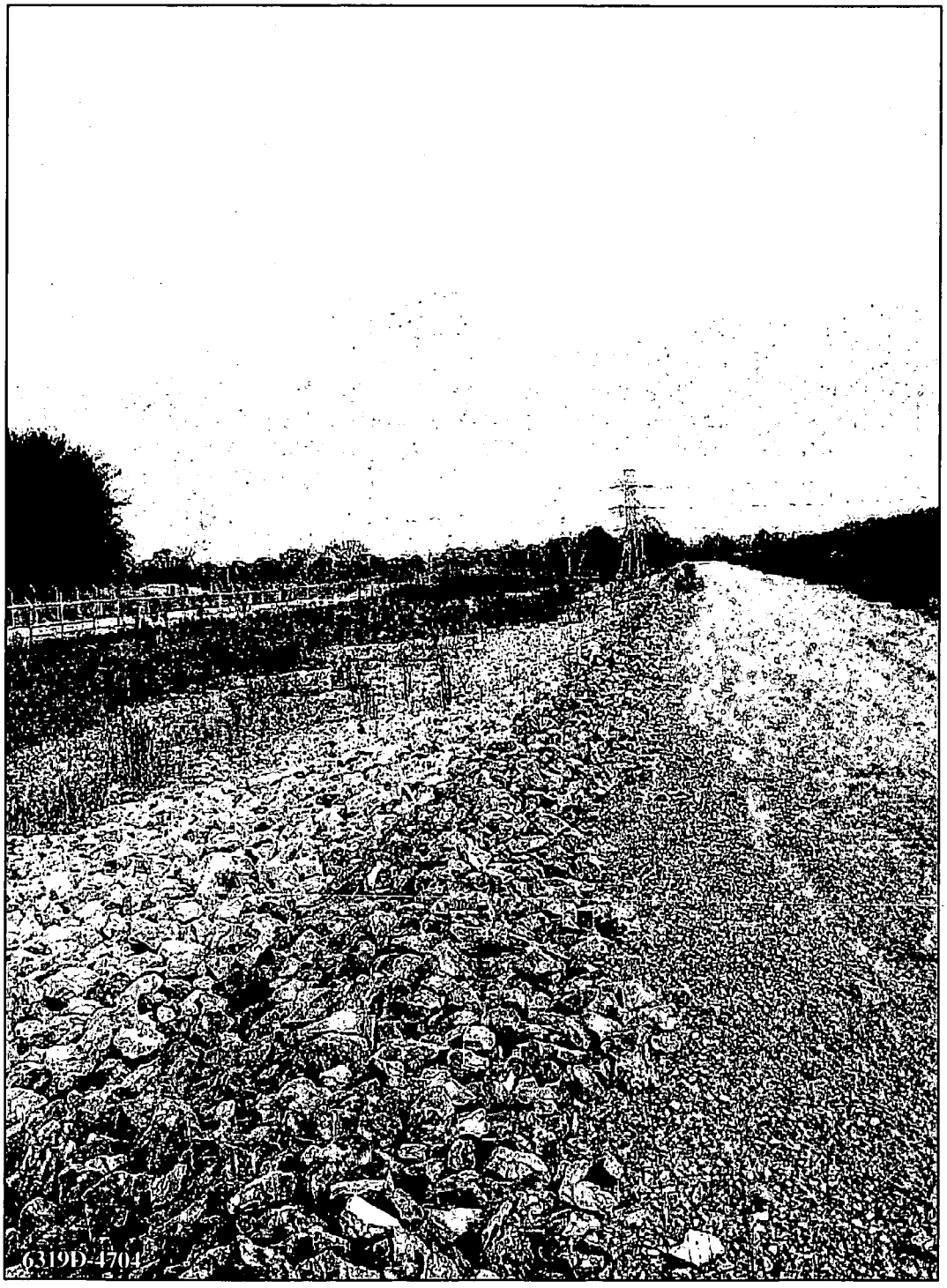

North Drainage
(looking east)

Graphic 8306.10

10/04

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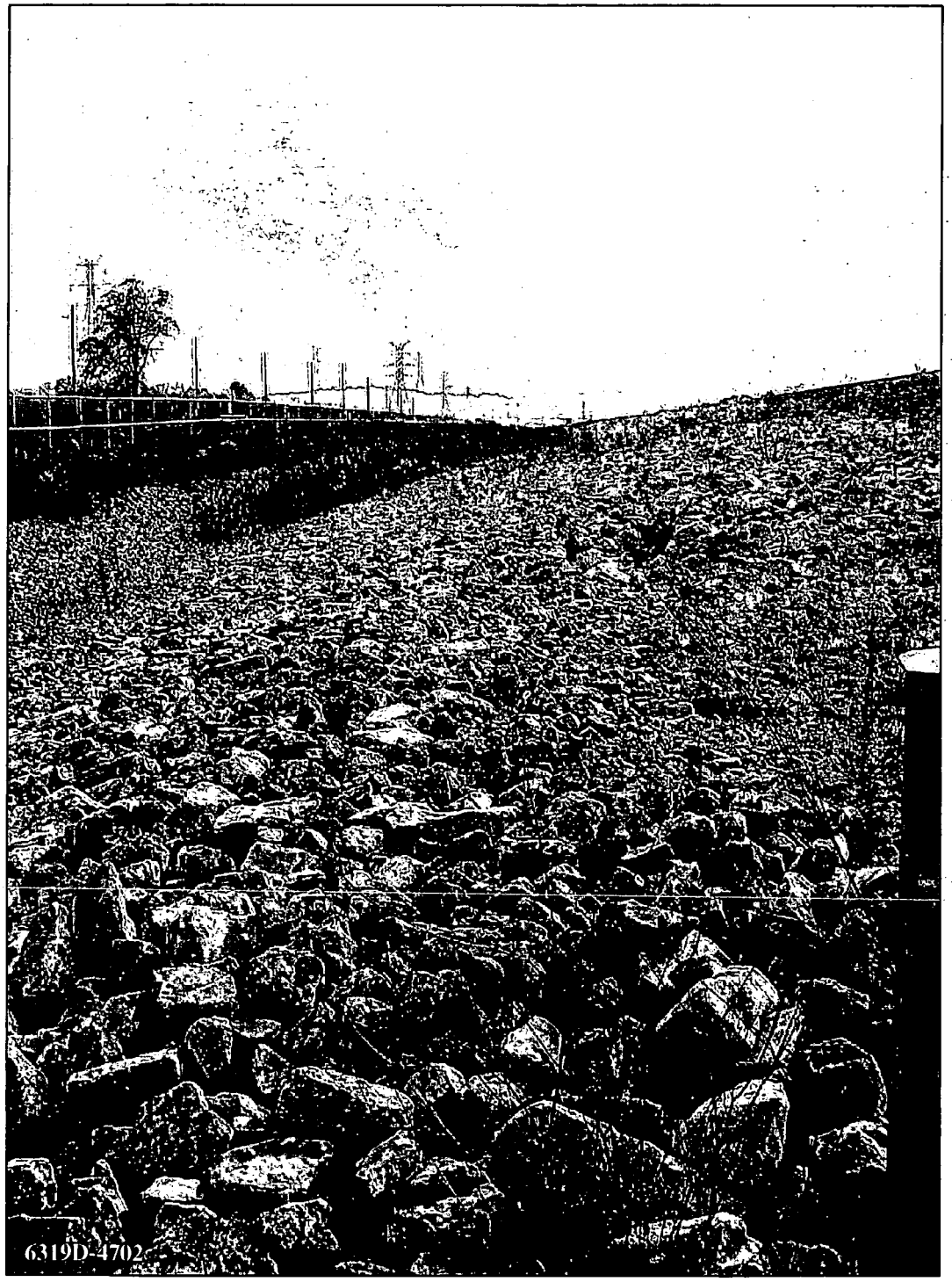

East Drainage
(looking south)

Graphic 8306.11

10/04

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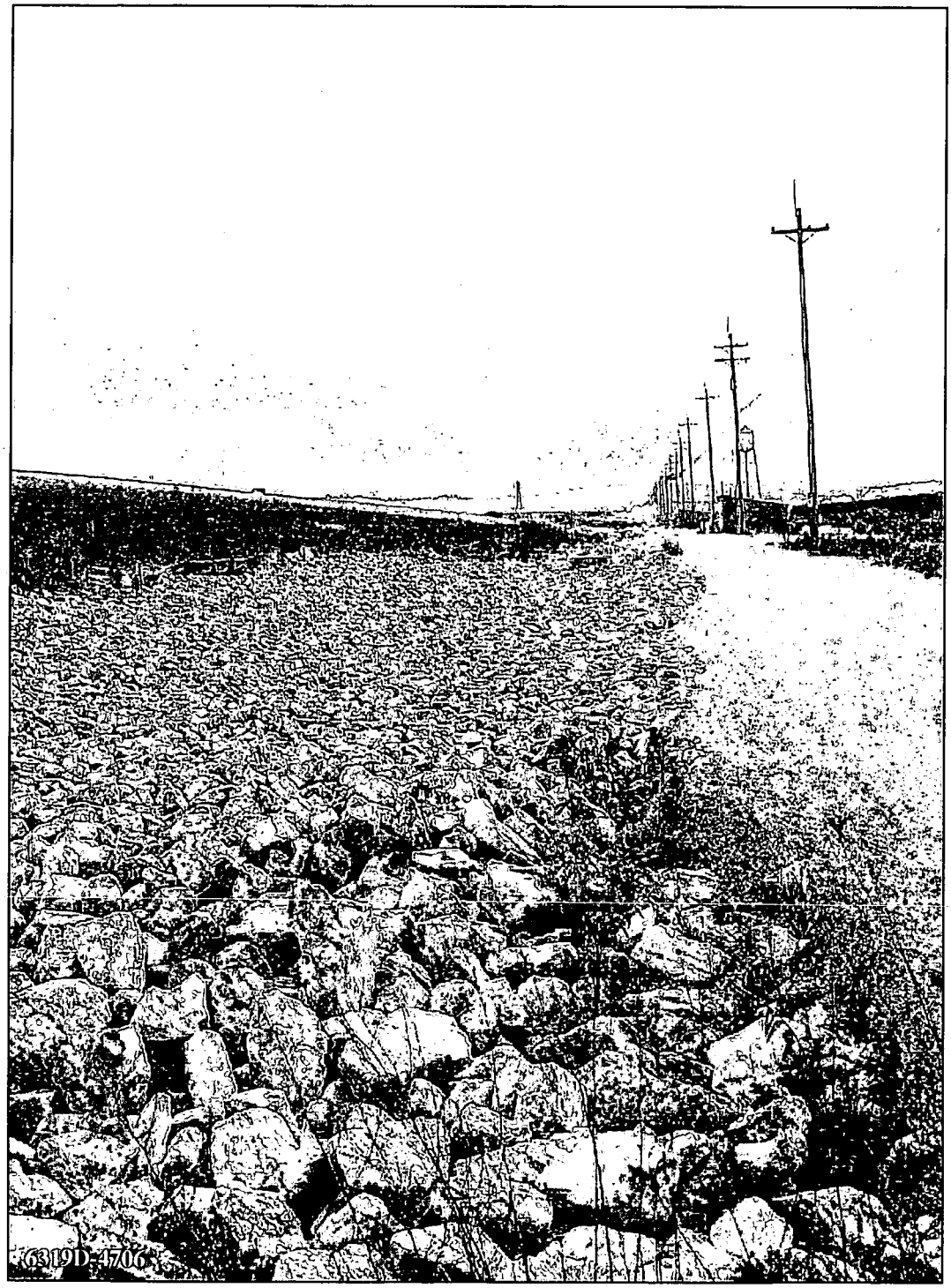

West Drainage
(looking south)

Graphic 8306.12

10/04

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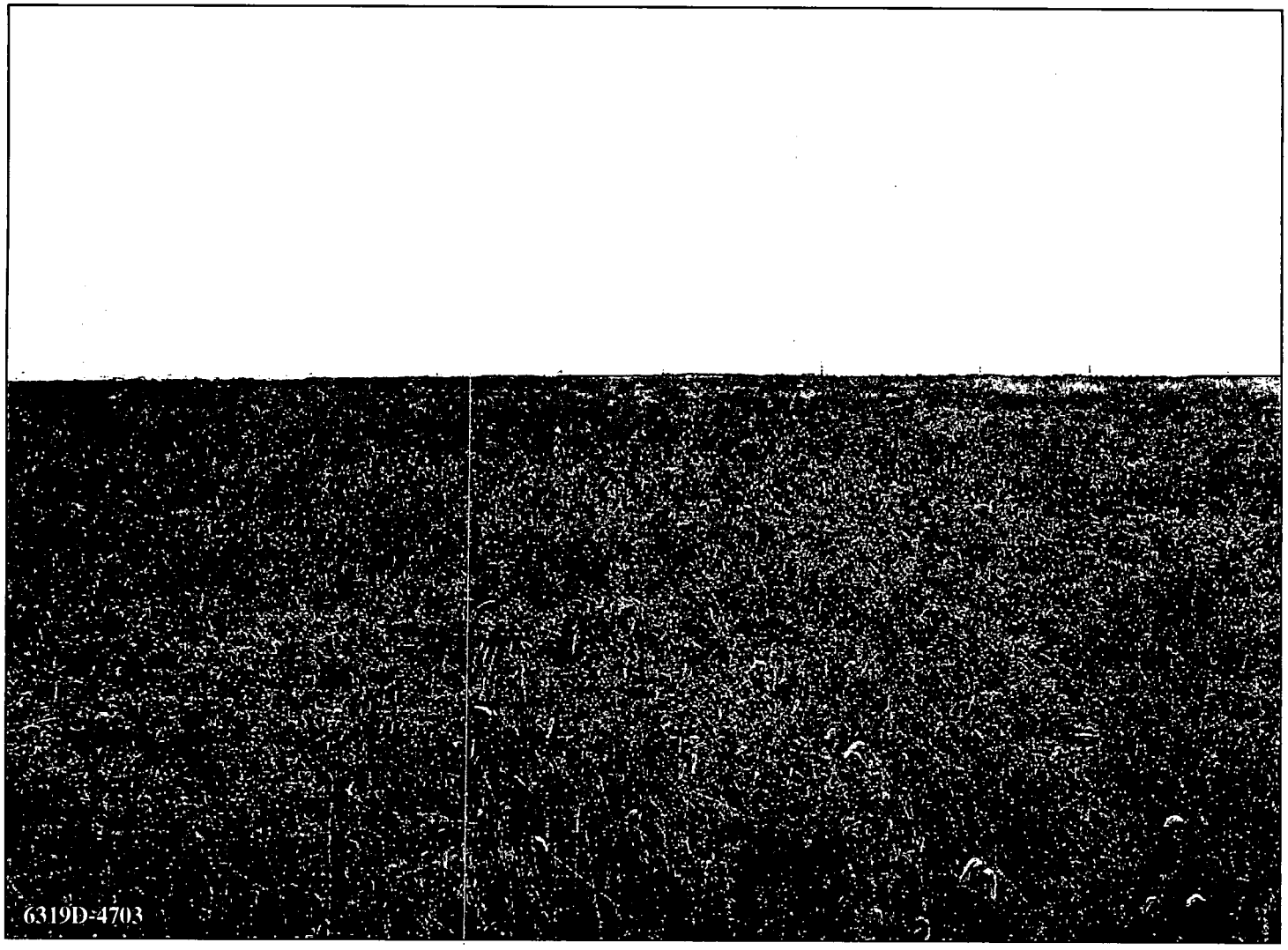
On-Site Disposal Facility Inspection Report

October 2004



North Face Cell 1

5768

Graphic 8306.2

10/04

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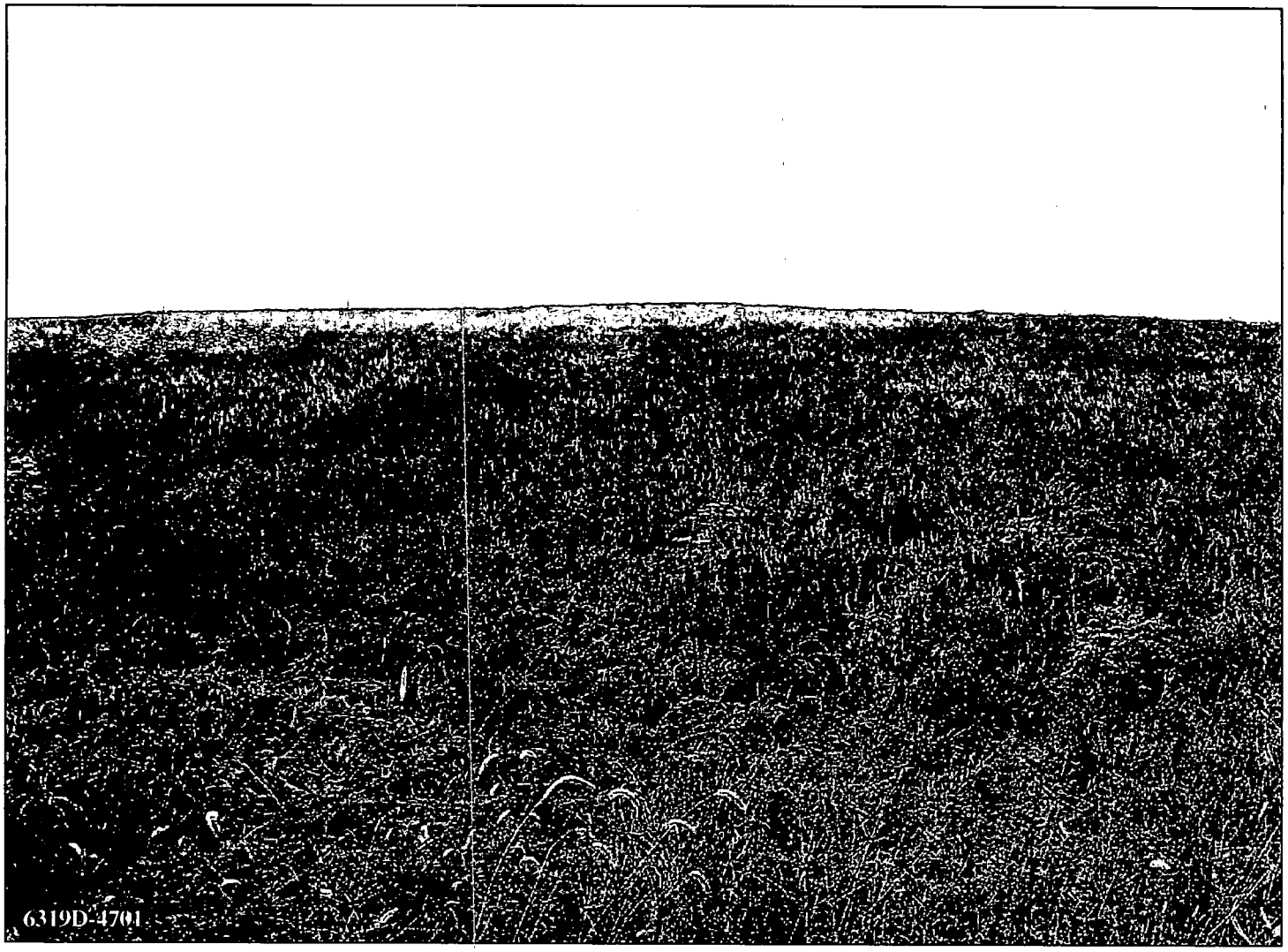
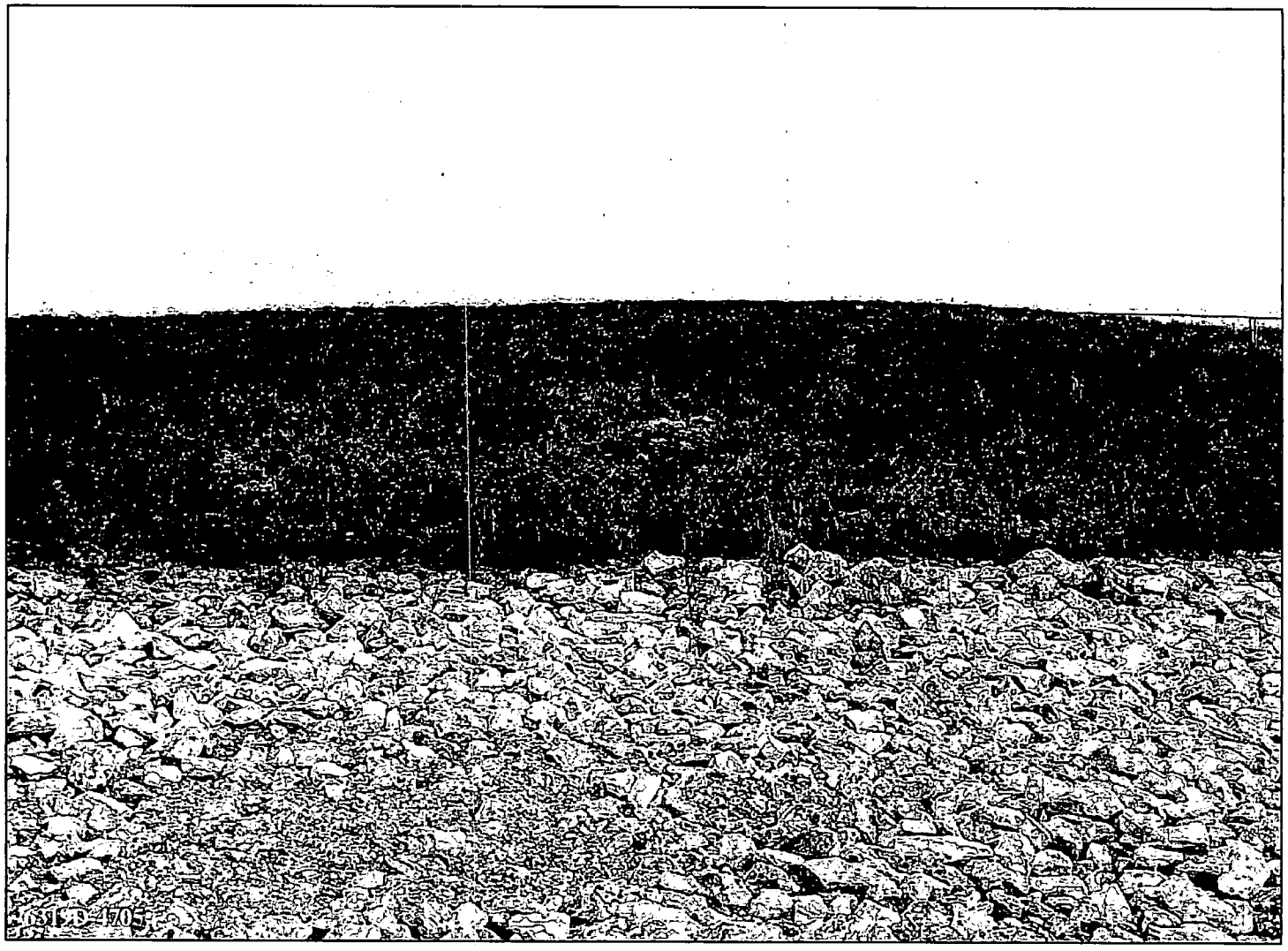


East Face Cell 1

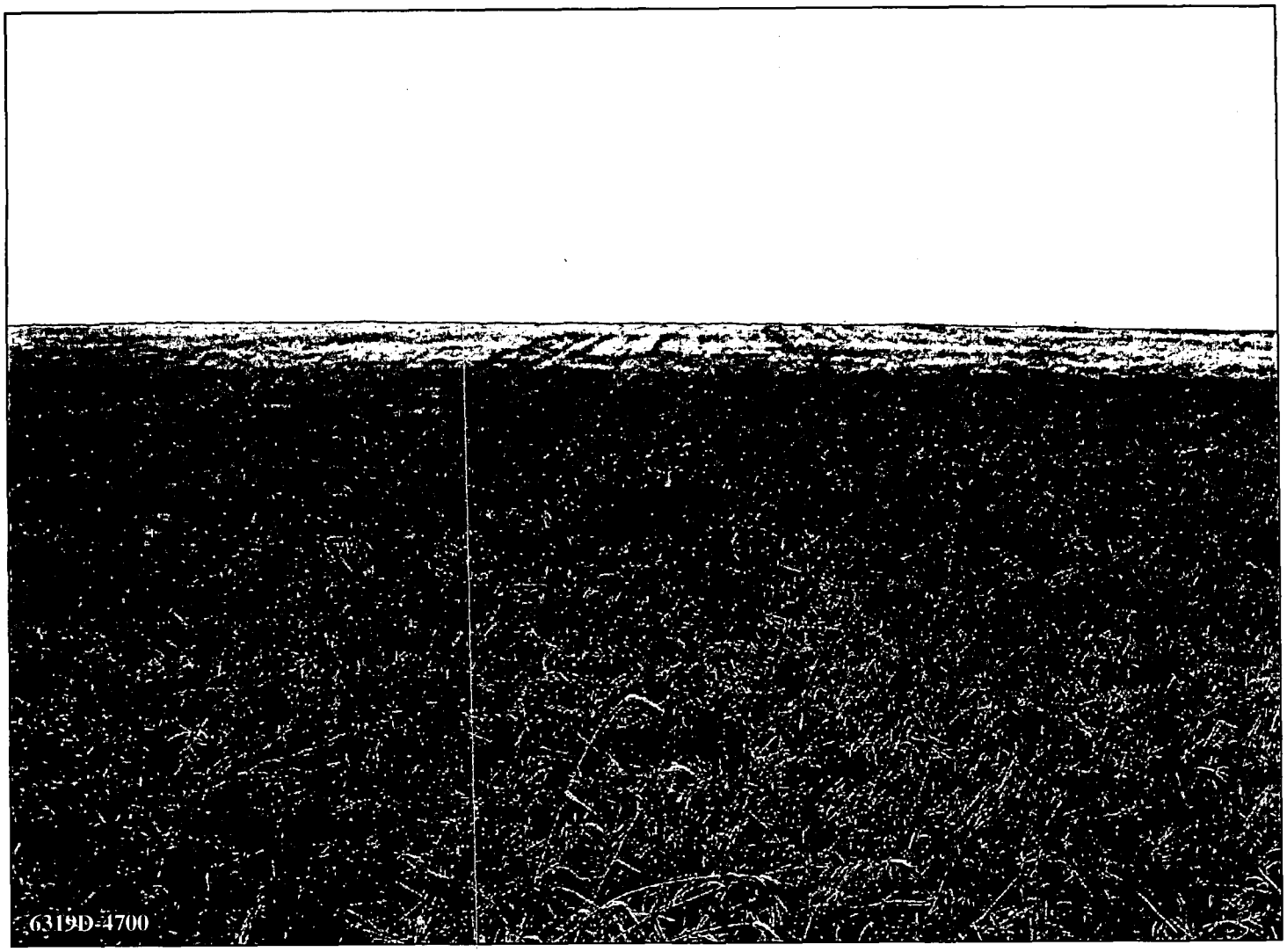


West Face Cell 1

5788

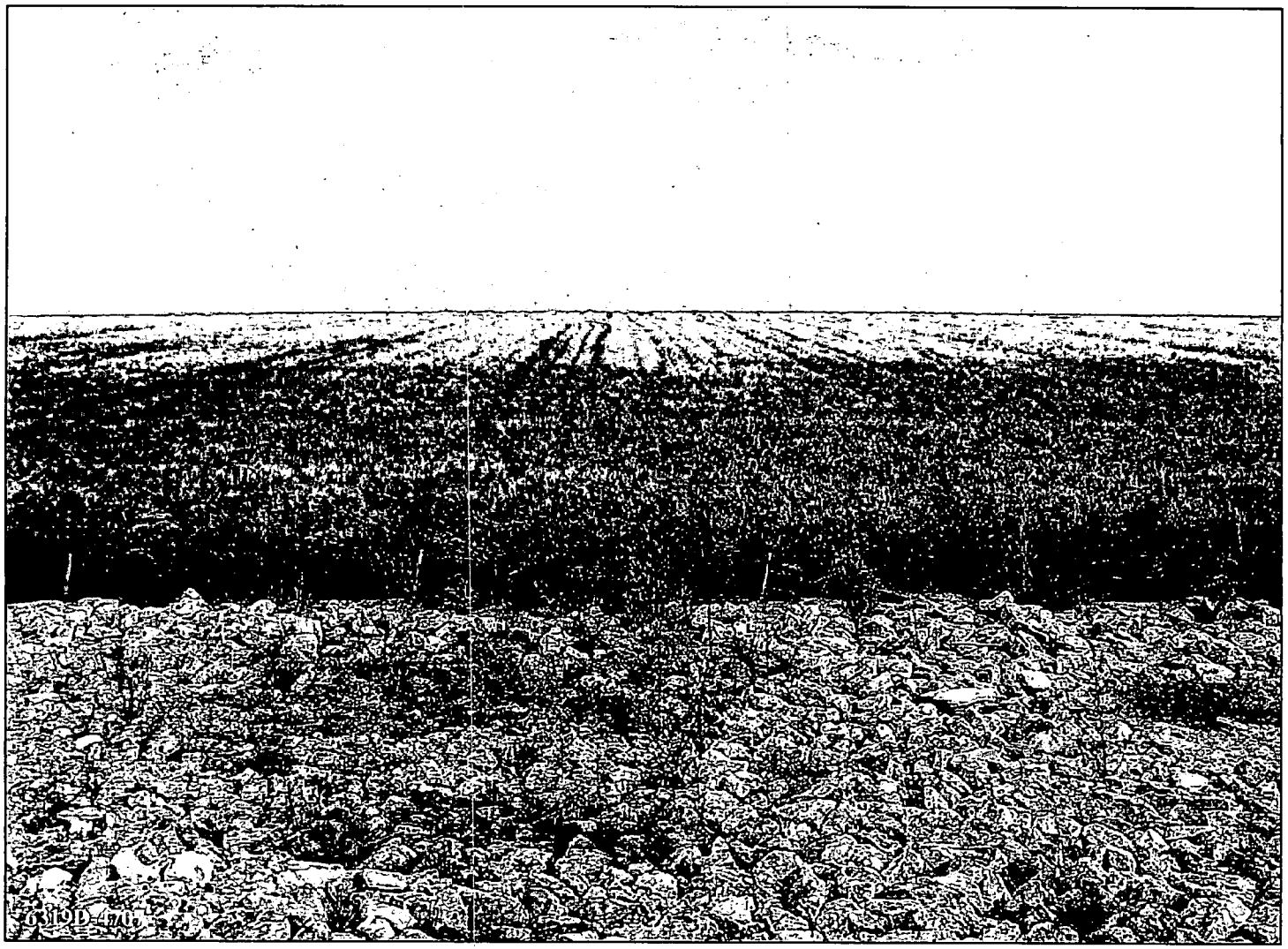
Graphic 8306.4

10/04



East Face Cell 2

5768-1

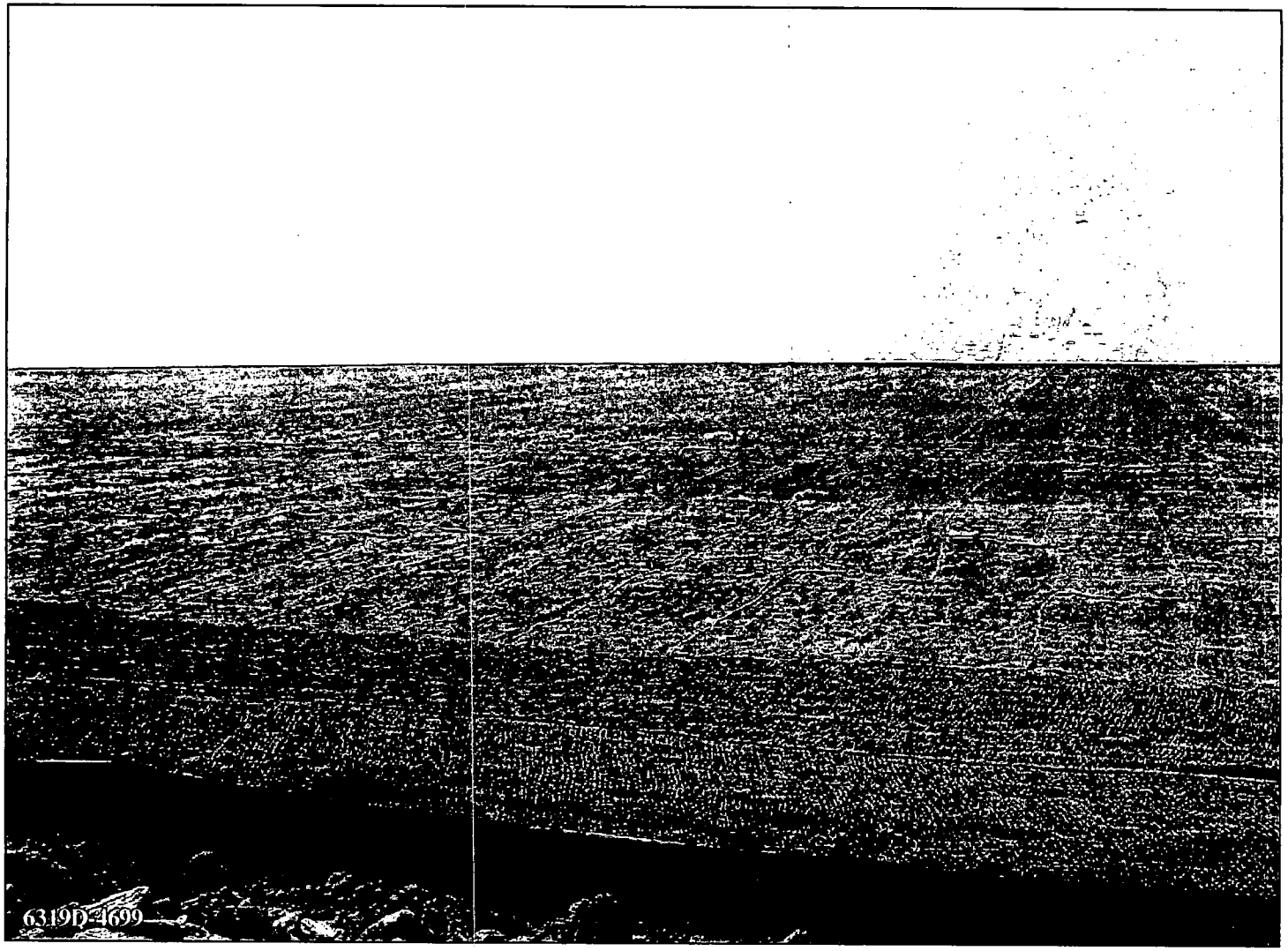


West Face Cell 2

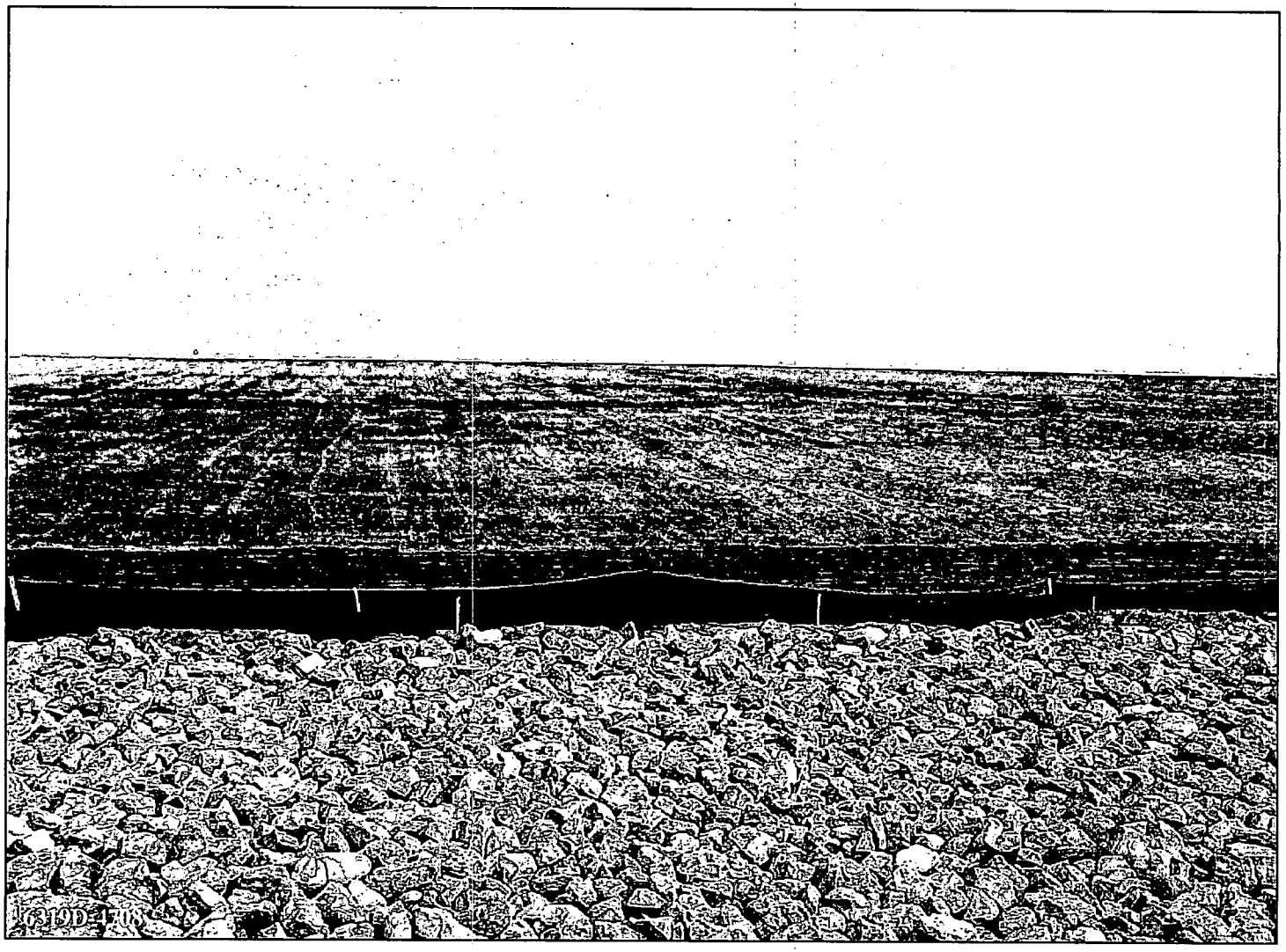
F-5788

Graphic 8306.6

10/04



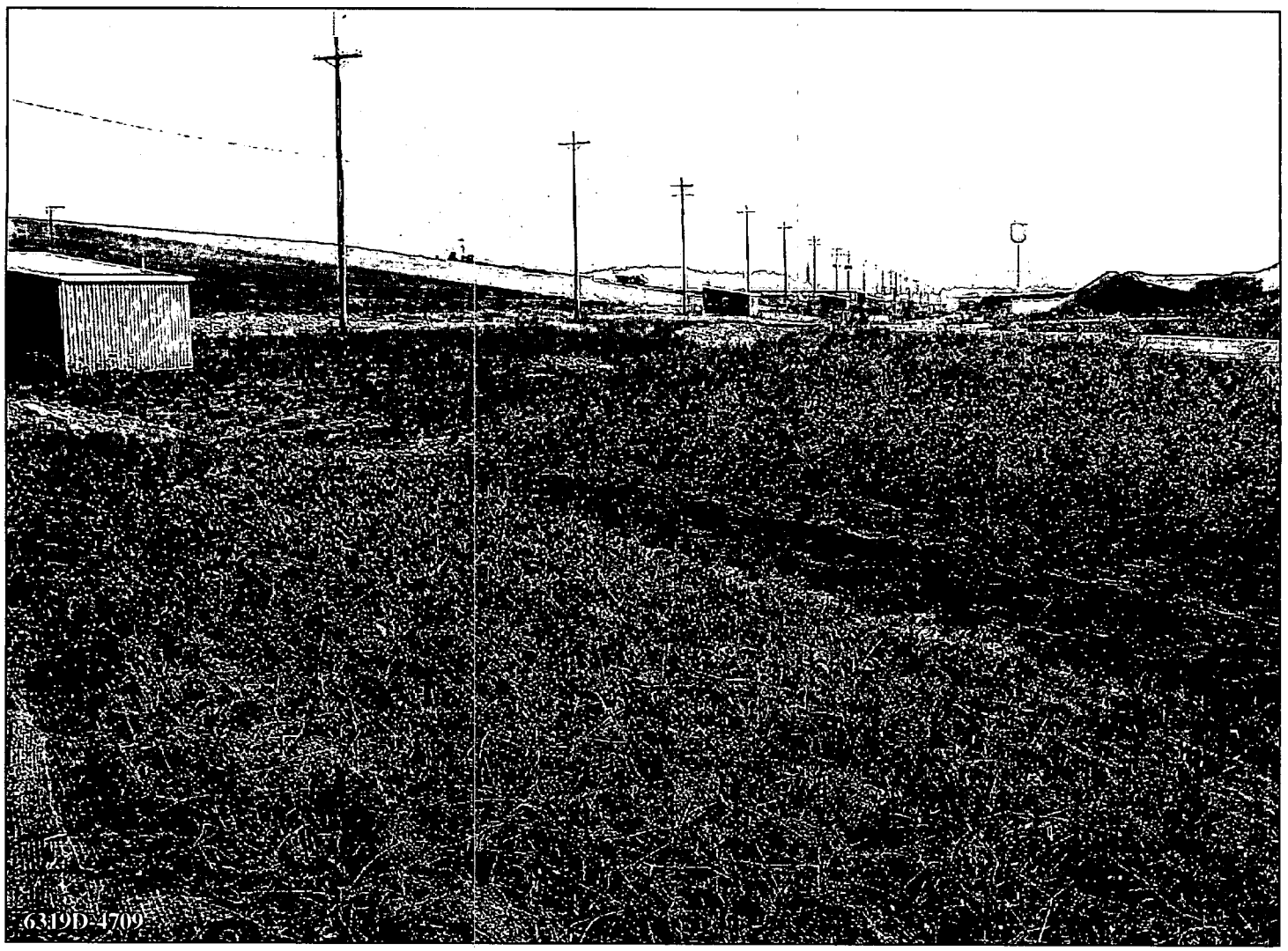
East Face Cell 3



West Face Cell 3

Graphic 8306.8

10/04



Outer West Drainage
(looking south)

0788

Graphic 8306.8

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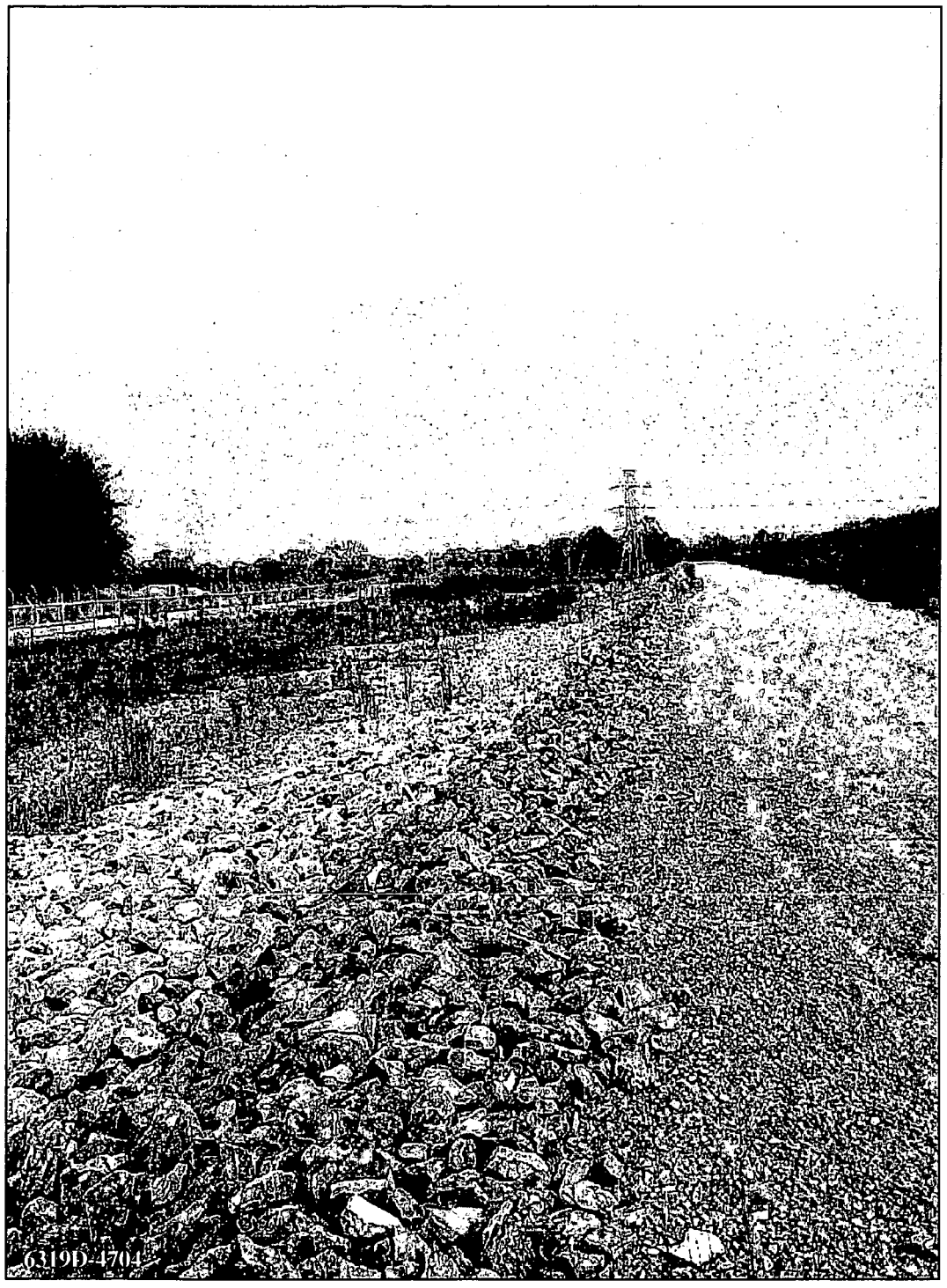
5788

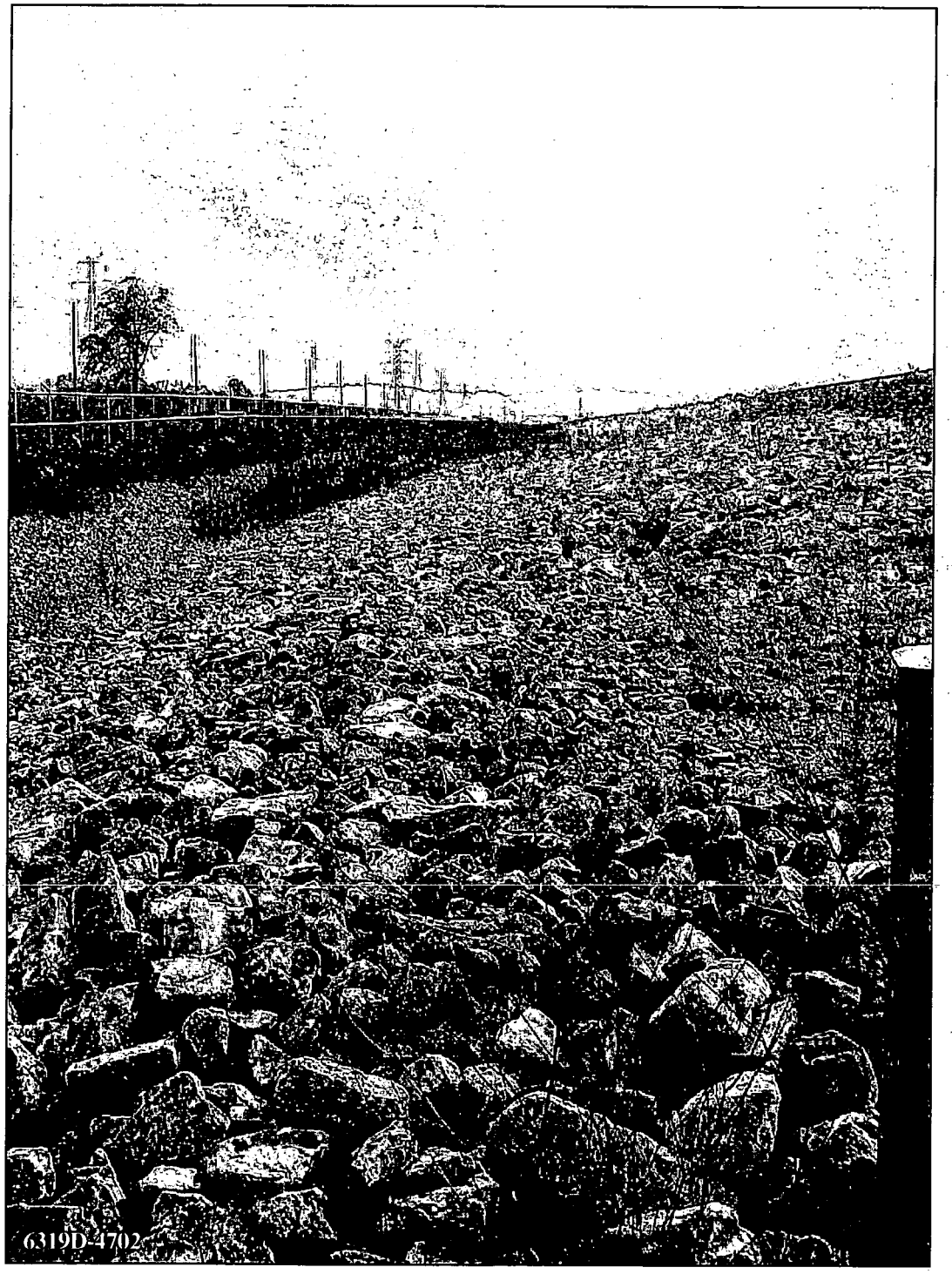


North Drainage
(looking east)

Graphic 8306.10

10/04

5788



East Drainage
(looking south)

Graphic 8306.11

10/04

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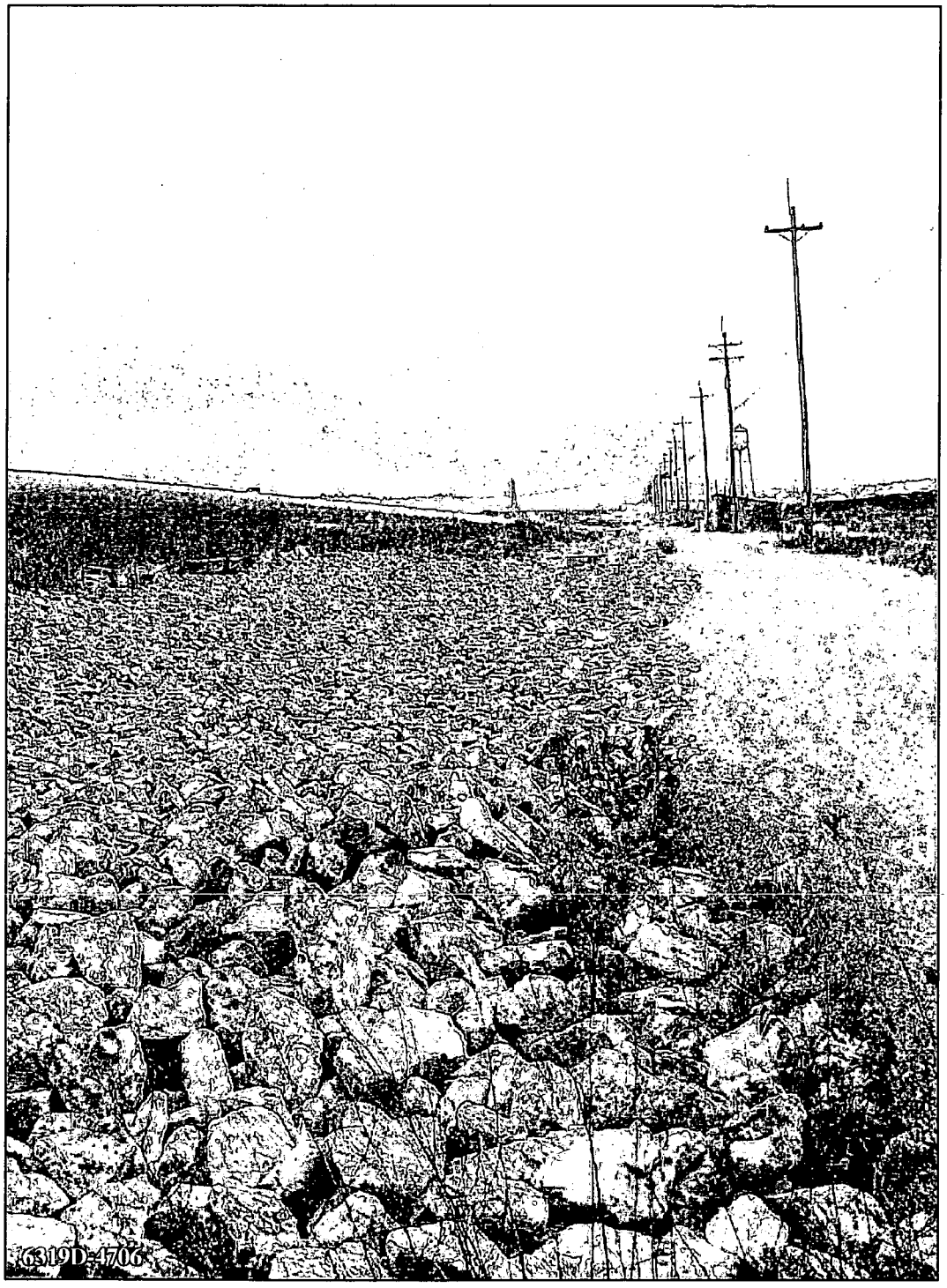

West Drainage
(looking south)

Graphic 8306.12

10/04

OSDF Cell 1 Post Closure Inspection Checklist

Date of Inspection: October 14, 2004 Weather Conditions: Cool and cloudy

Time of Inspection: 9:00 A.M. Temperature: 50 ^{0}F Wind Speed (Miles per hour) and Direction: 12 – 16 mph. w

Inspection By: Fluor Fernald, DOE-FCP, OLM, OEPA, Ohio Department of Health, Tetra Tech Inc. Transect Direction: East/West

Inspection Component	Condition A* or U*	Comments	Corrective Action(s) Proposed	Reference Source
1. Entrance Road/Monitoring Access Road				
1A. Verify entrance gate, lock and signage are intact and in good working order.	A	N/A	N/A	PCC&IP 20100-PL-010 Rev. 1 July 97
1B. Verify that access gates are locked to prevent unauthorized entry.	A	N/A	N/A	"
1C. Visually observe condition of access road for signs of erosion, ruts, standing water, proper drainage and excess vegetation.	A	N/A	N/A	"
1D. Verify that access road surfacing, cross slope, reflectors, and signage are intact and in good condition.	A	N/A	N/A	"
2. Chain Link Fence and Signage				
2A. Walk length of fence and ensure fence, posts, etc. are intact and in good condition. Ensure that gates are closed/locked to prevent unauthorized entry.	A	N/A	N/A	PCC&IP & OSDF Tech Spec #02831
2B. Verify that the proper signage is intact and in good condition at the following locations: Restricted Access; Certified Area; and Restored Area. (Some signs not installed at this time).	A	N/A	N/A	"
2C. Check for vegetation growing over fences, barricades, signs and any noxious vegetation per State of Ohio Regulations (attached) and invasive plants growing on or around OSDF perimeter.	A	N/A	N/A	"
3. Surface Water Management				
3A. Check integrity of drainage channels around OSDF for erosion or debris restricting water flow (see attached map). Build up of debris/sedimentation in drainage ditch is not to exceed 6 inches.	A	N/A	N/A	OSDF Tech. Spec. #02270; PCC&IP
3B. Visually check the integrity of RipRap in drainage channels for signs of deterioration or removal of rock.	A	N/A	N/A	See above & OSDF Tech. Spec. #02271
3C. Visually check for the presence of woody vegetation growing in drainage channels and in Rip-Rap	A	N/A	N/A	"
3D. Visually check the integrity of run-on and run-off control features including: Ditch checks, Gravity Inlet structures, and Culverts.	A	N/A	N/A	See above & Construction Drawing # 90X-6000-G-00073

***A** = Satisfactory ***U** = Unsatisfactory (comments required)

** Transcect Direction should alternate each inspection (North to South & East to West)

OSDF Cell 1 Post Closure Inspection Checklist

Date of Inspection: October 14, 2004 Weather Conditions: Cool and cloudy

Time of Inspection: 9:00 A.M. Temperature: 50 ^{0}F Wind Speed (Miles per hour) and Direction: 12 – 16 mph. w

Inspection By: Fluor Fernald, DOE-FCP, OLM, OEPA, Ohio Department of Health, Tetra Tech Inc. Transect Direction: East/West

Inspection Component	Condition A* or U*	Comments	Corrective Action(s) Proposed	Reference Source
4. (A) Final Cover				
4A. Walk cover and side slopes in 25-ft (+/- 5-ft) transects and visually inspect for the following items:**				PCC&IP
4A1. Inspect erosion rills/channels. Flag any observable rills/channels greater than 3 inches wide and 6 inches deep or excessive erosion.	U	Some small erosion rills present	Rills did not measure 3" by 6" and do not require repair	"
4A2. Any observable depressions, settlement/subsidence, slumping or desiccation cracks. Flag any observable depressions, slumps, settlement/subsidence or dessication cracks.	U	There are two areas where depressions were located; near the top on the east face; one on the northeast corner	The areas will be monitored. If there is progression, the areas will be repaired.	"
4A3. Any ponding or standing water. Flag any standing water.	A	N/A	N/A	"
4A4. Evidence of burrowing animals or other bio-intrusion. Flag any observable evidence of bio-intrusion.	U	There are many locations where animals were digging. The burrows do not go more than a few inches at most locations.	None of the burrows are currently active after a few weeks. Removed soil was pushed back into holes.	"
4A5. Evidence of vehicle traffic on the OSDF cap.	A	N/A	N/A	"
4B. Walk toe of slope and visually inspect for the following:				PCC&IP & Phase III Drwgs #90X-6000-G-00302 & 90X-6000-G-00310
4B1. Evidence of settlement/subsidence, erosion, and seepage. Flag any observable evidence of settlement/subsidence, erosion, or seepage.	A	N/A	N/A	"
4B2. A 20-ft corridor at the toe for the presence of woody vegetation, siltation, and/or biointrusion. Flag any woody vegetation, siltation, and/or biointrusion.	U	There is one location on the west side at the toe where woody vegetation is growing.	Woody vegetation needs to be removed.	"
4B3. Condition of rip-rap. Flag any observable abnormalities.	A	N/A	N/A	"
4C. Inspect toe at final cover for evidence of freezing or siltation. Flag any observable abnormalities.	A	N/A	N/A	"

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** Transect Direction should alternate each inspection (North to South & East to West)

5788

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OSDF Cell 1 Post Closure Inspection Checklist

Date of Inspection: October 14, 2004 Weather Conditions: Cool and cloudy

Time of Inspection: 9:00 A.M. Temperature: 50 °F Wind Speed (Miles per hour) and Direction: 12 – 16 mph. w

Inspection By: Fluor Fernald, DOE-FCP, OLM, OEPA, Ohio Department of Health, Tetra Tech Inc. Transect Direction: East/West

Inspection Component	Condition A* or U*	Comments	Corrective Action(s) Proposed	Reference Source
4. (B) Final Cover — Vegetation				
4D. Walk cover and side slopes in 25-ft (+/- 5-ft) transects and visually check vegetative cover for the following:				OSDF Tech. Spec. #02930
4D1. General health of grass cover and signs of stressed or dead grass should be noted.	A	N/A	N/A	"
4D2. Adequate grass coverage/density with no bares spots greater than 3-ft in diameter. Flag any bare spots greater than 3-ft in diameter. Any areas with questionable vegetative coverage will be sampled for percent cover and type of vegetation using meter-square quadrats.	A	N/A	N/A	"
4D3. Inspect the cover for the presence of woody vegetation (i.e., trees or shrubs) or noxious/invasive plants growing. Flag any woody and/or noxious/invasive vegetation for removal/herbicide.	U	Thistle is growing in a couple of patches on the north face of the cell.	Monitored cell cap in early spring for thistle. Any thistle will be treated with a selective herbicide.	"
5. Cover Monitoring System				
5A. Visually inspect the integrity of the cover monitoring system: check Junction boxes, manholes, pressure transducer risers, soil water status nest headers, and settlement plates of the remote monitoring system for evidence of damage (see attached map). Check that lids and caps on enclosures are intact and in good working order.	N/A	N/A	N/A	OSDF Drwg. # 90X-5500-E-00581 & 90X-5500-G-00577
5B. Visually inspect monitoring system manholes and junction boxes for the presence of animals, insects, rodents or misc. biota. Note the presence or evidence of any biota.	N/A	N/A	N/A	"
5C. Visually inspect manholes and junction boxes and their immediate vicinity for the presence of standing water. Flag all standing water.	N/A	N/A	N/A	"
6. Groundwater Monitoring Wells				
6A. Visually inspect all groundwater wells for damage and integrity of well infrastructure.	A	N/A	N/A	PPC&IP
6A1. Groundwater Monitoring Wells	A	N/A	N/A	"
6A2. Horizontal Monitoring Wells	A	N/A	N/A	"

***A** = Satisfactory ***U** = Unsatisfactory (comments required)

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OSDF Cell 1 Post Closure Inspection Checklist

Date of Inspection: October 14, 2004 Weather Conditions: Cool and cloudy

Time of Inspection: 9:00 A.M. Temperature: 50 ^{0}F Wind Speed (Miles per hour) and Direction: 12 – 16 mph. w

Inspection By: Fluor Fernald, DOE-FCP, OLM, OEPA, Ohio Department of Health, Tetra Tech Inc. Transect Direction: East/West

Inspection Component	Condition A* or U*	Comments	Corrective Action(s) Proposed	Reference Source
7. Miscellaneous				
7A. Visually inspect the integrity of survey benchmarks. Flag/note any abnormalities.	A	N/A	N/A	PPC&IP
7B. Visually inspect the integrity of the perched water interceptor trench (once installed). Note any abnormalities.	A	N/A	N/A	
7C. Visually observe/inspect the corridor 50-ft outside of OSDF for signs/evidence of land use changes, settlement/subsidence, erosion, standing water, encroachment, livestock grazing or noxious vegetation. Note any changes/abnormalities.	A	N/A	N/A	
7D. Visually inspect all infrastructure for any act of vandalism.	A	N/A	N/A	"
7E. List any other observations not noted in the categories above.	U	A piece of silt fence is lying on the west side of the cell (at bottom near cell 2). It is not necessary that the fence be there.	The extra piece of silt fence can be removed.	"

***A** = Satisfactory ***U** = Unsatisfactory (comments required)

OSDF Cell 2 Post Closure Inspection Checklist

Date of Inspection: October 14, 2004 Weather Conditions: Cool and cloudy

Time of Inspection: 9:00 A.M. Temperature: 50 ^{0}F Wind Speed (Miles per hour) and Direction: 12 – 16 mph. w

Inspection By: Fluor Fernald, DOE-FCP, OLM, OEPA, Ohio Department of Health, Tetra Tech, Inc. Transect Direction**: East/West

Inspection Component	Condition A* or U*	Comments	Corrective Action(s) Proposed	Reference Source
1. Entrance Road/Monitoring Access Road				
1A. Verify entrance gate, lock and signage are intact and in good working order.	A	N/A	N/A	PCC&IP 20100-PL-010 Rev. 1 July 97
1B. Verify that access gates are locked to prevent unauthorized entry.	A	N/A	N/A	"
1C. Visually observe condition of access road for signs of erosion, ruts, standing water, proper drainage and excess vegetation.	A	N/A	N/A	"
1D. Verify that access road surfacing, cross slope, reflectors, and signage are intact and in good condition.	A	N/A	N/A	"
2. Chain Link Fence and Signage				
2A. Walk length of fence and ensure fence, posts, etc. are intact and in good condition. Ensure that gates are closed/locked to prevent unauthorized entry.	A	N/A	N/A	PCC&IP & OSDF Tech Spec #02831
2B. Verify that the proper signage is intact and in good condition at the following locations: Restricted Access; Certified Area; and Restored Area. (Some signs not installed at this time).	A	N/A	N/A	"
2C. Check for vegetation growing over fences, barricades, signs and any noxious vegetation per State of Ohio Regulations (attached) and invasive plants growing on or around OSDF perimeter.	A	N/A	N/A	"
3. Surface Water Management				
3A. Check integrity of drainage channels around OSDF for erosion or debris restricting water flow (see attached map). Build up of debris/sedimentation in drainage ditch is not to exceed 6 inches.	A	N/A	N/A	OSDF Tech. Spec. #02270; PCC&IP
3B. Visually check the integrity of RipRap in drainage channels for signs of deterioration or removal of rock.	A	N/A	N/A	See above & OSDF Tech. Spec. #02271
3C. Visually check for the presence of woody vegetation growing in drainage channels and in Rip-Rap	A	N/A	N/A	"
3D. Visually check the integrity of run-on and run-off control features including: Ditch checks, Gravity Inlet structures, and Culverts.	A	N/A	N/A	See above & Construction Drawing # 90X-6000-G-00073

***A** = Satisfactory ***U** = Unsatisfactory (comments required)

** Transcect Direction should alternate each inspection (North to South & East to West)

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OSDF Cell 2 Post Closure Inspection Checklist

Date of Inspection: October 14, 2004 | Weather Conditions: Cool and cloudy

Time of Inspection: 9:00 A.M. | Temperature: 50 °F | Wind Speed (Miles per hour) and Direction: 12 – 16 mph. w

Inspection By: Fluor Fernald, DOE-FCP, OLM, OEPA, Ohio Department of Health, Tetra Tech, Inc. | Transect Direction**: East/West

Inspection Component	Condition A* or U*	Comments	Corrective Action(s) Proposed	Reference Source
4. (A) Final Cover				
4A. Walk cover and side slopes in 25-ft (+/- 5-ft) transects and visually inspect for the following items:**				PCC&IP
4A1. Inspect erosion rills/channels. Flag any observable rills/channels greater than 3 inches wide and 6 inches deep or excessive erosion.	U	Some small erosion rills are present.	Rills do not measure 3" by 6" and do not need repair.	"
4A2. Any observable depressions, settlement/subsidence, slumping or desiccation cracks. Flag any observable depressions, slumps, settlement/subsidence or dessication cracks.	A	N/A	N/A	"
4A3. Any ponding or standing water. Flag any standing water.	A	N/A	N/A	"
4A4. Evidence of burrowing animals or other bio-intrusion. Flag any observable evidence of bio-intrusion.	U	There is much evidence of animals digging, especially on the east side. The burrows do not go more than a few inches.	None of the burrows are currently active after a few weeks. Removed soil was pushed back into holes.	"
4A5. Evidence of vehicle traffic on the OSDF cap.	A	N/A	N/A	"
4B. Walk toe of slope and visually inspect for the following:				PCC&IP & Phase III Drwgs #90X-6000-G-00302 & 90X-6000-G-00310
4B1. Evidence of settlement/subsidence, erosion, and seepage. Flag any observable evidence of settlement/subsidence, erosion, or seepage.	A	N/A	N/A	"
4B2. A 20-ft corridor at the toe for the presence of woody vegetation, siltation, and/or biointrusion. Flag any woody vegetation, siltation, and/or biointrusion.	A	N/A	N/A	"
4B3. Condition of rip-rap. Flag any observable abnormalities.	A	N/A	N/A	"
4C. Inspect toe at final cover for evidence of freezing or siltation. Flag any observable abnormalities.	A	N/A	N/A	"

*A = Satisfactory *U = Unsatisfactory (comments required)

** Transect Direction should alternate each inspection (North to South & East to West)

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OSDF Cell 2 Post Closure Inspection Checklist

Date of Inspection: October 14, 2004 Weather Conditions: Cool and cloudy

Time of Inspection: 9:00 A.M. Temperature: 50 °F Wind Speed (Miles per hour) and Direction: 12 – 16 mph. w

Inspection By: Fluor Fernald, DOE-FCP, OLM, OEPA, Ohio Department of Health, Tetra Tech, Inc. Transect Direction**: East/West

Inspection Component	Condition A* or U*	Comments	Corrective Action(s) Proposed	Reference Source
4. (B) Final Cover — Vegetation				
4D. Walk cover and side slopes in 25-ft (+/- 5-ft) transects and visually check vegetative cover for the following:				OSDF Tech. Spec. #02930
4D1. General health of grass cover and signs of stressed or dead grass should be noted.	A	N/A	N/A	"
4D2. Adequate grass coverage/density with no bares spots greater than 3-ft in diameter. Flag any bare spots greater than 3-ft in diameter. Any areas with questionable vegetative coverage will be sampled for percent cover and type of vegetation using meter-square quadrats.	A	N/A	N/A	"
4D3. Inspect the cover for the presence of woody vegetation (i.e., trees or shrubs) or noxious/invasive plants growing. Flag any woody and/or noxious/invasive vegetation for removal/herbicide.	A	N/A	N/A	"
5. Cover Monitoring System				
5A. Visually inspect the integrity of the cover monitoring system: check Junction boxes, manholes, pressure transducer risers, soil water status nest headers, and settlement plates of the remote monitoring system for evidence of damage (see attached map). Check that lids and caps on enclosures are intact and in good working order.	N/A	N/A	N/A	OSDF Drwg. # 90X-5500-E-00581 & 90X-5500-G-00577
5B. Visually inspect monitoring system manholes and junction boxes for the presence of animals, insects, rodents or misc. biota. Note the presence or evidence of any biota.	N/A	N/A	N/A	"
5C. Visually inspect manholes and junction boxes and their immediate vicinity for the presence of standing water. Flag all standing water.	N/A	N/A	N/A	"
6. Groundwater Monitoring Wells				
6A. Visually inspect all groundwater wells for damage and integrity of well infrastructure.	A	N/A	N/A	PPC&IP
6A1. Groundwater Monitoring Wells	A	N/A	N/A	"
6A2. Horizontal Monitoring Wells	A	N/A	N/A	"

*A = Satisfactory *U = Unsatisfactory (comments required)

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5706

OSDF Cell 2 Post Closure Inspection Checklist

Date of Inspection: October 14, 2004 Weather Conditions: Cool and cloudy

Time of Inspection: 9:00 A.M. Temperature: 50 ^{0}F Wind Speed (Miles per hour) and Direction: 12 – 16 mph. w

Inspection By: Fluor Fernald, DOE-FCP, OLM, OEPA, Ohio Department of Health, Tetra Tech, Inc. Transect Direction**: East/West

Inspection Component	Condition A* or U*	Comments	Corrective Action(s) Proposed	Reference Source
7. Miscellaneous				
7A. Visually inspect the integrity of survey benchmarks. Flag/note any abnormalities.	N/A	N/A	N/A	PPC&IP
7B. Visually inspect the integrity of the perched water interceptor trench (once installed). Note any abnormalities.	A	N/A	N/A	
7C. Visually observe/inspect the corridor 50-ft outside of OSDF for signs/evidence of land use changes, settlement/subsidence, erosion, standing water, encroachment, livestock grazing or noxious vegetation. Note any changes/abnormalities.	A	N/A	N/A	
7D. Visually inspect all infrastructure for any act of vandalism.	A	N/A	N/A	"
7E. List any other observations not noted in the categories above.	U	On the west side of cell 2 there is a larger hole measuring 2 feet long, 9 inches wide, and 7 inches deep – cause unkown.	Hole needs to be filled in.	"

***A** = Satisfactory ***U** = Unsatisfactory (comments required)